

| No. | Pub. Year | Citations | File Name | File Size (bytes) |
|-----|-----------|-----------|--------------|-------------------|
| 8 | 1973-1975 | 919 | RADBIB08.TXT | 931,609 |

The search criteria was for radiation or radiological for publication year greater than 1972 and less than 1976.

The document database four character field names and a descriptor for each field are as follows:

| | |
|------|--|
| ABS | Abstract |
| ACCD | Accession Date |
| ADNO | DTIC Number |
| AUTH | Author(s) |
| CCDE | Computer Code(s) |
| CLSS | Classification |
| CONN | Contract Number |
| CORP | Corporation |
| DATE | Report Date |
| DESC | Descriptor(s) |
| EFFT | Damage Mechanism |
| EMPF | Electro Magnetic Pulse File number(s) |
| HESO | High Explosive Shot(s) |
| INUM | Item Number |
| LA | Country or Language |
| PROJ | Project Number |
| REPN | Report Number |
| SHOT | Nuclear Test(s) |
| SUCE | Device Designation |
| SUJO | DASIAC Subject number(s) |
| SYMJ | Published in |
| SYST | System Affected |
| TEMP | Document Control number(s) |
| TITL | Report Title |
| TNFF | Tactical Nuclear Warfare |
| TREE | Transient Radiation Effects on Electronics number(s) |
| TSHO | Shot Type |

| Defense Threat Reduction Agency Declassification Review EO 12958 | |
|--|--|
| 1st REVIEW DATE: <u>3/11/00</u> | 2nd REVIEW DATE: <u>3/11/00</u> |
| AUTHORITY: <input checked="" type="checkbox"/> AD <input checked="" type="checkbox"/> AC <input checked="" type="checkbox"/> S <input checked="" type="checkbox"/> D | AUTHORITY: <input checked="" type="checkbox"/> AD <input checked="" type="checkbox"/> AC <input checked="" type="checkbox"/> S <input checked="" type="checkbox"/> D |
| NAME: <u>[Signature]</u> | NAME: <u>[Signature]</u> |
| 1. Classification System Changed 2. Classification Changed to <u>Unclass</u> 3. Contains No NSA Classified Info 4. Complete Title 5. Stripped From Declassification 6. Examples 1 2 3 4 5 6 7 8 9 | |

* WITH DELETIONS

Statement A

Approved for public release;

Distribution unlimited. 3/11/00

[Signature]

ATTACHMENT (2)

.folddata

Report Log for Bibliography

Report 'bibliography' scheduled as 'radbib'

Bibliography using full text searching with selection qualification.

STILAS text selection v6.2 started on Monday, June 13, 1994, 12:22 PM

Search will use the KUNI database

Search strings will be read from standard input

The catalog key will be written to standard output

19940613122244 BRS/Search-Engine v.5 started for seltext1

11379 records found for #1: RADIATION OR RADIOLOGICAL

1 searches considered

1 searches selected.

STILAS text selection finished on Monday, June 13, 1994, 12:26 PM

STILAS catalog selection v6.2 started on Monday, June 13, 1994, 12:22 PM

Catalog key will be read from standard input

The catalog key will be written to standard output

The author key will be written to standard output

The title key will be written to standard output

Catalog will be selected if year_of_pub is more than 1972 and less than 1976

11379 catalog record(s) considered

919 catalog record(s) selected.

STILAS catalog selection finished on Monday, June 13, 1994, 12:26 PM

STILAS call number selection v6.2 started on Monday, June 13, 1994, 12:22 PM

Catalog key will be read from standard input

The callnum primary key will be written to standard output

The shelving key will be written to standard output

String from standard input will be written to standard output

Call number will be selected if library is DOCUMENT

919 callnum record(s) considered

919 callnum record(s) selected.

STILAS call number selection finished on Monday, June 13, 1994, 12:26 PM

STILAS item selection v6.2 started on Monday, June 13, 1994, 12:22 PM

Item file will be read by callnum key from standard input

The item primary key will be written to standard output

String from standard input will be written to standard output

919 item record(s) considered

919 item record(s) selected.

STILAS item selection finished on Monday, June 13, 1994, 12:26 PM

Sort: sorting by CALL NUMBER

STILAS item printing v6.2 started on Monday, June 13, 1994, 12:22 PM

Catalog key will be read from standard input

The print will be a catalog level shelflist

The MARC tags will be written to standard output

The call number only will be written to standard output

The item information will be written to standard output

The report title option will be used

919 catalog(s) printed.

0 catacnt(s) printed.

919 call number(s) printed.

919 item(s) printed.

0 itemacnt(s) printed.

STILAS item printing finished on Monday, June 13, 1994, 12:27 PM

.folddata

.report

.title
Bibliography

Produced Monday, June 13, 1994 at 12:22 PM

.end
INUM: 12529
AUTH: WELLS P.B. ; BRIGGS E.A. ; ROSAMOND E.H.
CLSS: C
CONN: DASA 01 69 C 0082
CORP: KAMAN SCIENCES CORP (COLORADO SPRINGS COLO) ; GENERAL ELECTRIC-TEMPO
(SANTA BARBARA CA)
DATE: 7309
DESC: Nuclear weapon test yield L1
DESC: Environmental Conditions at Nuclear Weapon Test Site weather L1
DESC: Nuclear Weapon Environment Infrared Output rate L1
DESC: Nuclear Weapon Environment Infrared Output energy spectrum L1
DESC: Nuclear Weapon Environment Visible Output energy spectrum L1
DESC: test instruments thermal temperature L1
DESC: BIBLIOGRAPHY
DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
DESC: Nuclear Weapon Environment Visible Output rate L1
DESC: Nuclear weapon test timing position firing data L1
DESC: Nuclear Weapon Environment Thermal Output L1
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
REPN: K 73 534 (R)
SUJO: 1-200-000 ; 1-320-000 ; 1-340-000 ; 1-420-000 ; 1-440-000 ;
2-110-000 ; 4-384-000 ; 4-834-000 ; 4-835-000 ; 4-841-000 ;
5-200-000
TEMP: A4329 C5 V3
TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA, VOL. 3-BIBLIOGRAPHY,
ROUGH DRAFT (U), CA. 500 P., (U)

.block
12529
.endblock

.block
copy: 1 id: 46081-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 15102
AUTH: CRANDALL W.K. ; MOLENKAMP C.R. ; WILLIAMS A.L. ; FULK M.M. ; LANGE
R. ; KNOX J.B.
CLSS: U
CCDE: ADPIC
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7301
DESC: Nuclear Weapon Environment fallout transfer L1
DESC: Nuclear Weapon Environment fallout Deposition L1
DESC: Nuclear Weapon Phenomenology cloud Motion L5
DESC: Nuclear Weapon Environment fallout intensity contours patterns L1
RADIATION DOSE
DESC: THEORY

REPN: UCRL 51328 ; TID 4500
SUJO: 2-224-000 ; 2-224-300 ; 2-225-000 ; 2-225-100
TITL: INVESTIGATION OF SCAVENGING OF RADIOACTIVITY FROM NUCLEAR DEBRIS
CLOUDS-RESEARCH IN PROGRESS (U), 40 P., (U)

.block
15102
.endblock

.block
copy: 1 id: 48356-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 15245
AUTH: KAUFMAN A.B. ; NEWHOFF H.R.
CLSS: U
CORP: LITTON SYSTEMS, INC., GUIDANCE AND CONTROL SYSTEMS DIV. (SODD LAND
HILLS, CA.)
DATE: 7300
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DTL CIRCUITS
EFFT: TREE
SUJO: 3-222-000
TITL: TRANSIENT RADIATION EFFECTS UPON INTEGRATED DTL CIRCUITS (U), 8 P.,
(U)
TREE: 320

.block
15245
.endblock

.block
copy: 1 id: 48480-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 15323
CLSS: U
CORP: HARRY DIAMOND LABS. (WASH., D.C.)
DATE: 7304
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 DIODE SCR-5 TRANSISTORS
DESC: TABULAR SURVEY
EFFT: TREE
SUJO: 3-221-000
TITL: RADIATION EFFECTS ON SEMICONDUCTOR DEVICES; SUMMARY OF DATA-1 (U),
50 P., (U)
TREE: 310

.block
15323
.endblock

.block
copy: 1 id: 48547-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 15371
AUTH: JULIENNE P.S. ; DAVIS J.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., D.C.)
DATE: 7302
DESC: Radiation Transport thermal L1
DESC: THEORY
DESC: Plasma Physics MHD fusion L1
REPN: NRL MR 2556
SUJO: 9-500-000 ; 9-610-000
TITL: RADIATION ESCAPE FROM AN OPTICALLY THICK PLASMA (U), 36 P., (U)

.block

15371

.endblock

.block

copy: 1 id: 48590-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15377
AUTH: OBLOW E.M.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7303
DESC: THEORY SUMMARY
DESC: Radiation Transport L1
REPN: ORNL TM 4110
SUJO: 9-600-000
TITL: GENERAL SENSITIVITY THEORY FOR RADIATION TRANSPORT (U), 25 P., (U)

.block

15377

.endblock

.block

copy: 1 id: 48596-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15411
ADNO: 524412L
AUTH: HOBBS N.P. ; WETMORE K.R. ; WALSH J.P.
CLSS: C
CCDE: TRAP
CONN: F 29601 70 C 0085
CORP: KAMAN AVIDYNE (BURLINGTON, MA.)
DATE: 7301
DESC: Nuclear Weapon Effects aerospace systems L1 B-1 VERTICAL STABILIZER
DESC: EXAMPLE PROBLEM
DESC: THEORY CODE

EFFT: THERMAL
REPN: AFWL TR 71 61 VOL. 2 ; KA TR 86 2
SUJO: 3-110-000
TEMP: A3446
TITL: TRAPP--A DIGITAL COMPUTER PROGRAM FOR CALCULATING THE RESPONSE OF
AIRCRAFT TO A THERMAL RADIATION FROM A NUCLEAR EXPLOSION; VOL. 2,
EXAMPLE PROBLEM (U), 206 P., (C)

.block
15411
.endblock

.block
copy: 1 id: 48619-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 15444
ABS: Available computer codes simulating gamma-radiation exposure rates
and total exposures received from the radioactive base surge are
analyzed. The physical models used by two different computer
programs are compared. Differences between computer model
calculations and experimental data obtained from several nuclear
tests are examined. Analysis shows that one model is more
advantageous for use in antisubmarine warfare (ASW) problems than
the other. Consideration and variation of a number of burst
conditions indicate that the results of one model are significantly
more realistic than those of the other. Due to an advance in the
technology of computer systems in recent years, it is possible to
improve the capabilities of the programmed version of one model.
Therefore, recommendations are included for updating that model to
improve both its accuracy and versatility.

ADNO: 524964
AUTH: HENNEY A.G.
CLSS: CFRD
CCDE: DAED
CORP: NAVAL ORDNANCE LAB. (SILVER SPRING, MD.)
DATE: 7302
DESC: SUMMARY
DESC: Nuclear Weapon Environment fallout accumulation rate L1
DESC: Nuclear Weapon Phenomenology base surge L1 RADIOACTIVE POOL

FORMATION

DESC: Nuclear Weapon Environment fallout arrival time L1
DESC: Nuclear Weapon Environment fallout down fraction L1
REPN: NOLTR 73 003
SHOT: UMBRELLA ; WAHOO ; SWORDFISH ; BAKER ; WIGWAM
SUJO: 2-224-120 ; 2-225-200 ; 2-225-300 ; 2-225-400
TEMP: B2432
TITL: ANALYSIS AND COMPARISON OF THE AVAILABLE COMPUTER CODES SIMULATING
THE GAMMA-RADIATION EXPOSURE RATES AND TOTAL EXPOSURES RECEIVED FROM
THE RADIOACTIVE BASE SURGE (U), 247 P., (CFRD)
TNFF: 4860 ; 4887

.block
15444
.endblock

.block

copy: 1 id: 48642-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15446
AUTH: LACETERA J.F.
CLSS: SRD
CCDE: RADCHEM (HYDRO CODE)
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7302
DESC: Composition Chemistry Atmosphere Reaction Rates L5 APPENDIX A
DESC: Radiation Transport x-ray L1 HIGH ALTITUDE 30-100 KM
DESC: COMPARES BOLTZMANN-SAHA EQUILIB. RESULTS WITH LTE RESULTS ; SUMMARY
REPN: BRL R 1636
TSHO: HI-ALT
SUJO: 5-400-000 ; 9-640-000
TEMP: A3329
TITL: EFFECTS OF NONEQUILIBRIUM PHENOMENA ON X-RAY TRANSPORT IN THE
ATMOSPHERE (U), 70 P., (SRD)

TREE: 980

.block

15446

.endblock

.block

copy: 1 id: 48644-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15448
ADNO: 524777
AUTH: MCCORMAC B.M. ; ANDERSON A.D. ; VARNEY R.N.
CLSS: C 3
CONN: DASA 01 71 C 0085
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7301
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Emission Spectra of the Atmosphere L5
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L5 ELECTROJETS ELECTRON
PARTICLE PRECIPITATION
DESC: SUMMARY
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
REPN: LMSC D313396
SUJO: 4-820-600 ; 4-823-000 ; 5-600-000 ; 5-800-000
TEMP: A3240
TITL: SIMULATION OF NUCLEAR EFFECTS WITH HIGH LATITUDE ENERGETIC PHENOMENA
(U), 15 P., (C)

.block

15448

.endblock

.block

copy: 1 id: 48646-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15463

ADNO: 525760

AUTH: HUNTINGTON J.H. ; ROSSMAN R.V. ; OLIVER D.B. ; CASE J.A. ; SZYMANSKI
D.R. ; HAMMOND J.A.

CLSS: SRD

CONN: F 04611 69 C 0062

CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA.)

DATE: 7303

DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects ordnance propellants solid L1

DESC: Nuclear Weapon Effects ordnance propellants liquid L1

DESC: Nuclear Weapon Effects electrical mechanical non-aircraft engines

non-missile motors L1 MOTOR CASE MATERIALS

EFFT: X-RAY ; GAMMA

REPN: PIFR 143 VOL. 1

SHOT: DIESEL TRAIN

TSHO: UG-CONTAINED

SUJO: 3-164-000 ; 3-165-000 ; 3-233-000

SYST: MINUTEMAN III

TEMP: A3522 V.1

TITL: EFFECTS OF RADIATION ON PROPELLANT SYSTEMS; VOL. 1 (U), 105 P.,
(SRD)

.block

15463

.endblock

.block

copy: 1 id: 48657-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15464

ADNO: 525761

AUTH: HUNTINGTON J.H. ; ROSSMAN R.V. ; OLIVER D.B. ; CASE J.A. ; SZYMANSKI
D.R. ; HAMMOND J.A.

CLSS: SRD

CONN: F 04611 69 C 0062

CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA.)

DATE: 7304

DESC: Nuclear Weapon Effects ordnance propellants solid L1

DESC: Nuclear Weapon Effects ordnance propellants liquid L1

DESC: Nuclear Weapon Effects electrical mechanical non-aircraft engines

non-missile motors L1 TANK AND MOTOR CASE

DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL

DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L5

EFFT: X-RAY

REPN: PIFR 143 VOL. 2
SUJO: 3-164-000 ; 3-165-000 ; 3-233-000 ; 4-140-000
TEMP: A3522 V. 2
TTTL: EFFECTS OF RADIATION ON PROPELLANT SYSTEMS; VOL. 2, EXPERIMENTAL
(U), 30. P., (SRD) 309 P., (SRD)

.block

15464

.endblock

.block

copy: 1 id: 48658-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15495
AUTH: SCHOUTENS J.E.
CLSS: U
CORP: GENERAL ELECTRIC, TEMPO (SANTA BARBARA, CA.)
DATE: 7304
DESC: SECEDE ; THEORY
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1 BARIUM RELEASES
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1 E AND F LAYER
CONDUCTIVITIES
TSHO: HI-ALT
SUJO: 4-120-000 ; 5-800-000
TTTL: ESTIMATES OF THE ISOTROPIC AND PEDERSEN CONDUCTIVITIES IN THE E AND
F-LAYERS OF THE EARTH'S ATMOSPHERE (U), CA. 30 P., (U)

.block

15495

.endblock

.block

copy: 1 id: 48682-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15520
CLSS: U
CORP: MCDONNELL DOUGLAS ASTRONAUTICS CO.-WEST (HUNTINGTON BEACH, CA.)
DATE: 7300
DESC: Simulation Facilities Techniques TREE L1 TREL
SUJO: 4-272-000
TTTL: TRANSIENT RADIATION EFFECTS LABORATORY (U), 12 P., (U)
TREE: 642

.block

15520

.endblock

.block

copy: 1 id: 48702-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15529
ADNO: 909326
AUTH: LEWIS H.N. ; NELSON C.W. ; BARROWS A.W. JR.
CLSS: U
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7302
DESC: SIMULATION (PULSE REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects ordnance propellants solid L1 CMDB
EFFT: NEUTRON
REPN: BRL MR 2274
SUJO: 3-164-000
SYST: SPRINT
TITL: NEUTRON RADIATION EFFECTS ON SOLID PROPELLANT BURNING (U), 28 P.,
(U)

.block

15529

.endblock

.block

copy: 1 id: 48710-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15553
AUTH: FRY M.P. ; LIBELO L.F.
CLSS: U
CORP: NAVAL ORDNANCE LAB. (SILVER SPRING, MD.)
DATE: 7303
DESC: THEORY
DESC: RF EMP shielding protection L1
EMPF: 303 ; 304
REPN: NOLTR 73 43
SUJO: 9-810-000
TITL: SCATTERING OF ELECTROMAGNETIC RADIATION BY APERTURES VI. FIRST
DISCUSSIONS OF GENERALIZING BABINET'S PRINCIPLE IN TWO DIMENSIONS
(U), 14 P., (U)

.block

15553

.endblock

.block

copy: 1 id: 48731-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15605
AUTH: MORGAN G.L. ; LOVE T.A. ; PEREY F.G.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7304
DESC: Radiation Transport neutron L1
DESC: SIMULATION (LINAC) ; EXPERIMENTAL TABULAR
DESC: Cross Sections neutron L1 CARBON

REPN: ORNL TM 4157
SUJO: 9-650-000 ; 9-820-000
TTTL: INTEGRAL NEUTRON SCATTERING MEASUREMENTS ON CARBON FROM 1 TO 20 MEV
(U), 57 P., (U)

TREE: 412

.block

15605

.endblock

.block

copy: 1 id: 48776-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15606

AUTH: SROUR J.R. ; OTHMER S. ; CURTIS O.L.

CLSS: U

CONN: DAAG 39 69 C 0039 ; DAAG 39 73 C 0019

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA.)

DATE: 7303

DESC: RECOMBINATION AND TRAPPING STUDIES SIMULATION (NEUTRON GENERATOR)
SIMULATION (REACTOR) ; THEORY EXPERIMENTAL SURVEY

DESC: Nuclear Weapon Effects electronic pieceparts solar cells L1

DESC: Nuclear Weapon Effects materials metals alloys L1 SILICON

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

EFFT: NEUTRON ; GAMMA

REPN: HDL 039 3 ; NRTC 72 16R

SUJO: 3-221-000 ; 3-223-000 ; 3-243-000

TTTL: RADIATION EFFECTS ON SEMICONDUCTOR MATERIALS AND DEVICES (U), 252
P., (U)

TREE: 310 ; 200

.block

15606

.endblock

.block

copy: 1 id: 48777-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15657

AUTH: GREENBAUM J.R.

CLSS: U

CCDE: SCEPTRE

CORP: GENERAL ELECTRIC CO., HEAVY MILITARY ELECTRONIC SYSTEMS (SYRACUSE,
N.Y.)

DATE: 7301

DESC: TABULAR CODE

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: 73 EMH 1

SUJO: 3-222-000

TTTL: NORMAL AND RADIATION MODELING OF AND-OR-INVERTER INTEGRATED CIRCUITS

FOR USE WITH COMPUTER-AIDED DESIGN AND ANALYSIS PROGRAMS (U), 25 P.,
(U)

TREE: 320 ; 250 ; 330

.block

15657

.endblock

.block

copy: 1 id: 48818-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15658

AUTH: GREENBAUM J.R.

CLSS: U

CCDE: SCEPTRE

CORP: GENERAL ELECTRIC CO., HEAVY MILITARY ELECTRONIC SYSTEMS (SYRACUSE,
N.Y.)

DATE: 7302

DESC: TABULAR CODE

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: 73 EMH 2

SUJO: 3-222-000

TITL: NORMAL AND RADIATION MODELING OF A 4 BIT SHIFT REGISTER INTEGRATED
CIRCUIT FOR USE WITH COMPUTER-AIDED DESIGN AND ANALYSIS PROGRAMS
(U), 39 P., (U)

TREE: 320 ; 250 ; 330

.block

15658

.endblock

.block

copy: 1 id: 48819-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15675

AUTH: SKIDMORE W.D. ; BAUM S.J.

CLSS: U

CORP: DEFENSE NUCLEAR AGENCY ; ARMED FORCES RADIOBIOLOGY RESEARCH
INSTITUTE (BETHESDA, MD.)

DATE: 7306

DESC: Nuclear Weapon Effects on animals RF microwave L1 ACUTE EFFECTS

DESC: SIMULATION (AFRRI EMP) ; EXPERIMENTAL

EFFT: EMP

EMPF: 500

REPN: AFRRI SR73 10

SUJO: 3-314-000

TITL: BIOLOGICAL EFFECTS IN RODENTS EXPOSED TO PULSED ELECTROMAGNETIC
RADIATION (U), 21 P., (U)

.block

15675

.endblock

.block

copy: 1 id: 48833-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15715
ADNO: 763196
AUTH: BENCK R.F. ; CRISCO C. ; MASTRANGELO C.J. ; POPE S.V. ; RUNQUIST
A.W.
CLSS: U
CONN: AT (49 7) 2883
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7306
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Environment Fallout Particles chemical composition
solubility L5
DESC: Simulation Facilities Techniques nuclear radiation fallout
simulation L1
REPN: BRL MR 2304
SHOT: SEDAN ; JOHNNIE BOY
TSHO: SURFACE ; UG-VENTED
SUJO: 2-222-100 ; 4-242-000
TITL: MECHANISMS OF FALLOUT PARTICLE FORMATION--ANNUAL PROGRESS REPORT FOR
PERIOD ENDING JUNE 1971 (U), 51 P., (U)

.block

15715

.endblock

.block

copy: 1 id: 48863-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15721
AUTH: HOWERTON R.J. ; MACGREGOR M.H.
CLSS: U
CONN: W 7405 ENG 48
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7303
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1
DESC: Orbital Mechanics L1
REPN: UCRL 51370
SUJO: 4-140-000 ; 9-100-000
TITL: EVALUATED NEUTRON REACTION DATA FOR URANIUM 235 (U), 30 P., (U)

.block

15721

.endblock

.block

copy: 1 id: 48867-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15776
AUTH: CRAMER S.N. ; ROUSSIN R.W. ; OBLow E.M.
CLSS: U
CCDE: SORS ; 06R ; MORSE
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7303
DESC: Cross Sections neutron L1 FE N O H20 LI
DESC: Radiation Transport neutron L1
DESC: EXPERIMENTAL
EFFT: NEUTRON
REPN: ORNL TM 4072
SUJO: 9-650-000 ; 9-820-000
TITL: MONTE CARLO CALCULATIONS AND SENSITIVITY STUDIES OF THE
TIME-DEPENDENT NEUTRON SPECTRA MEASURED IN THE LLL PULSED SPHERE
PROGRAM (U), 220 P., (U)

TREE: 980

.block

15776

.endblock

.block

copy: 1 id: 48919-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15777
AUTH: MORGAN G.L. ; LOVE T.A. ; PEREY F.G.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7306
DESC: Radiation Transport neutron L1
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
DESC: Cross Sections neutron L1
EFFT: NEUTRON
REPN: ORNL TM 4193
SUJO: 9-650-000 ; 9-820-000
TITL: INTEGRAL NEUTRON SCATTERING MEASUREMENTS ON IRON FROM 1 TO 20 MEV
(U), 51 P., (U)

TREE: 412

.block

15777

.endblock

.block

copy: 1 id: 48920-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15781
AUTH: OVERMYER R.F.
CLSS: SFRD
CCDE: FFHUFF ; STEP

SUJO: 9-620-000
TITL: DOMINO, A GENERAL PURPOSE CODE FOR COUPLING DISCRETE ORDINATES AND
MONTE CARLO RADIATION TRANSPORT CALCULATIONS (U), 118 P., (U)

TREE: 960

.block
15871

.endblock

.block

copy: 1 id: 49019-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15872

AUTH: DICKENS J.K. ; LOVE T.A. ; MORGAN G.L.

CLSS: U

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7307

DESC: EXPERIMENTAL

DESC: Orbital Mechanics L5

DESC: Radiation Transport neutron L5

DESC: Cross Sections neutron L1

REPN: ORNL TM 4252

SUJO: 9-100-000 ; 9-650-000 ; 9-820-000

TITL: GAMMA-RAY PRODUCTION DUE TO NEUTRON INTERACTIONS WITH CALCIUM FOR
INCIDENT NEUTRON ENERGIES BETWEEN 0.7 AND 20 MEV--TABULATED
DIFFERENTIAL CROSS SECTIONS (U), 58 P., (U)

TREE: 412

.block
15872

.endblock

.block

copy: 1 id: 49020-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16087

AUTH: KLOPCIC J.T. ; SWANSON D.L.

CLSS: U

CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)

DATE: 7307

DESC: Solid Mechanics L1

REPN: BRL MR 2310

SUJO: 9-200-000

TITL: ANALYTICAL MODEL OF THE FERROELECTRIC RADIATION DETECTOR (U), 25 P.,
(U)

.block
16087

.endblock

.block

copy: 1 id: 49177-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

CONN: DAAG 39 72 C 0058
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7301
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS
EFFT: BETA
REPN: HDL TR 058 1 ; GULF RT A11123
SUJO: 3-221-000 ; 3-222-000
TEMP: A3857
TITL: RADIATION EFFECTS IN SEMICONDUCTOR DEVICES (U), 82 P., (SFRD)
TREE: 310 ; 320

.block

15781

.endblock

.block

copy: 1 id: 48922-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15800
AUTH: BARTINE D.E. ; MYNAT F.R. ; OBLOW E.M.
CLSS: U
CCDE: SWANLAKE ; ANISN
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7305
DESC: Radiation Transport L1
DESC: Shielding Protection L1
DESC: THEORY
REPN: ORNL TM 3809
SUJO: 9-600-000 ; 9-800-000
TITL: SWANLAKE, A COMPUTER CODE UTILIZING ANISN RADIATION TRANSPORT
CALCULATIONS FOR CROSS SECTION SENSITIVITY ANALYSIS (U), 91 P., (U)

.block

15800

.endblock

.block

copy: 1 id: 48934-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 15871
AUTH: EMMETT M.B. ; BURGART C.E. ; HOFFMAN T.J.
CLSS: U
CCDE: DOMINO
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7307
DESC: Radiation Transport gamma L1
DESC: CODE
REPN: ORNL 4853

.endblock

INUM: 16089
ADNO: 910505
AUTH: SLATER C.O. ; ROBINSON J.C.
CLSS: U
CCDE: MORSE
CONN: DAAD 05 71 C 0150
CORP: UNIVERSITY OF TENNESSEE (KNOXVILLE, TN.) ; GULF ENERGY AND
ENVIRONMENTAL SYSTEMS
DATE: 7303
DESC: Radiation Transport L1 NEUTRONS
REPN: BRL CR 100 ; NEUT 0150 4
SUJO: 9-600-000
TITL: COUPLING OF FORWARD AND ADJOINT CALCULATIONS TO SOLVE
THREE-DIMENSIONAL DEEP PENETRATION PROBLEMS (U), 122 P., (U)
TREE: 970

.block

16089

.endblock

.block

copy: 1 id: 49178-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16092
ADNO: 912571L
AUTH: CLAYTON C.M.
CLSS: U
CCDE: FOX ; OGRE
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7306
DESC: CODE
DESC: Radiation Transport x-ray L1
REPN: BRL R 1655
SUJO: 9-640-000
TITL: USERS MANUAL FOR THE BRL FOLDING CODE, FOX (U), 160 P., (U)
TREE: 980

.block

16092

.endblock

.block

copy: 1 id: 49181-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16101
AUTH: ONEIL R.R. ; LEE E.T.P. ; HUPPI E.R. ; STAIR A.T. JR.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA.)
DATE: 7303
DESC: Nuclear Test Simulation Field Programs experiment design optical

radiation experiments UV visible IR L1 IR PHOTON YIELDS PHOTOMETERS
RADIOMETERS

DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L5 EXCEDE PAYLOAD
CONFIGURATION

DESC: test instruments IR L5

DESC: EXPERIMENTAL TABULAR

DESC: Composition Chemistry Atmosphere Reaction Rates L1 100 -110 KM
PRODUCTION MECHANISMS REACTION RATES

DESC: Emission Spectra of the Atmosphere L1 NO EMISSIONS AT 2.7 AND 5.4
MICRO METERS NO PLUS EMISSIONS AT 2.2 AND 4.3 MICRO METERS

DESC: test instruments EM propagation atmospheric chemistry L5 MASS
SPECTROMETER

REPN: AFCRL TR 73 0152

SUJO: 4-320-000 ; 4-383-000 ; 4-820-600 ; 4-820-900 ; 5-400-000 ;
5-600-000

TITL: PROJECT EXCEDE--SWIR EXPERIMENT (U), 40 P., (U)

.block

16101

.endblock

.block

copy: 1 id: 49186-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16146

AUTH: MAIENSCHIN F.C. ; ALSMILLER R.G. ; CLIFFORD C.E. ; PEELLE R.W.

CLSS: U

CONN: W 7405 ENG 26

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7308

DESC: Cross Sections gamma L5 ABSTRACTS

DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1

DESC: Cross Sections neutron L5 ABSTRACTS

REPN: ORNL 4902 VOL. 1

SUJO: 4-140-000 ; 9-820-000 ; 9-830-000

TITL: NEUTRON PHYSICS DIVISION ANNUAL PROGRESS REPORT FOR PERIOD ENDING
MAY 31, 1973 (U), 75 P., (U)

.block

16146

.endblock

.block

copy: 1 id: 49221-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16212

ABS: This report documents the collection, analysis, and evaluation of
the chemical explosion data obtained during HYDRA IIA, and a
comparison of HYDRA IIA data with underwater nuclear explosion data.
The HYDRA IIA project consisted of 13 underwater HBX-1 explosions at

varying depths in deep-but-constant-depth water. Four of the HBX-1 charges contained radioactive tracer isotopes. These tracer isotopes selected were used to simulate the time/space distribution of radioactive fission products within the regions affected by the event phenomena resulting from underwater nuclear explosions. Other HYDRA IIA explosions were traced with chemical dyes to determine sub-surface hydrodynamic flow patterns formed by the explosion bubble.

ABS: In addition, HYDRA IIA data included identification and determination of the time/space history of above-surface phenomena, radiation measurements of above-surface and underwater phenomena, determination of tracer isotope concentration in selected phenomena, underwater shock data, and local environmental conditions such as wind velocities and water temperature. Comparisons of HYDRA IIA and underwater nuclear explosions results postulate certain causal relationships between explosion phenomena and time/space characteristics of certain radiation fields as a function of shot depth. These comparisons also postulate other relationships of both military and scientific significance.

ADNO: 525767
AUTH: PERKINS W.W.
CLSS: CFRD
CORP: NAVAL UNDERSEA CENTER (SAN DIEGO, CA.)
DATE: 7304
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L1
DESC: HYDRA IIA SIMULATION (HE RADIOACTIVE TRACERS) ; EXPERIMENTAL
DESC: Nuclear Weapon Phenomenology base surge L1
DESC: Nuclear Weapon Phenomenology plumes spray domes L1
REPN: NUC TP 345 VOL. 1
SHOT: WAHOO ; UMBRELLA ; BAKER (CROSSROADS) ; WIGWAM ; SWORDFISH
TSHO: UW
SUJO: 2-223-200 ; 2-224-120 ; 2-224-130
TEMP: A4260
TITL: HYDRA IIA--COMPARISON OF HIGH EXPLOSIVE AND NUCLEAR UNDERWATER EXPLOSIONS; A SUMMARY, ANALYSIS, AND EVALUATION OF THE HYDRA IIA SERIES, VOL. 1 (U), 315 P., (CFRD)
TNFF: 4887

.block
16212
.endblock
.block
copy: 1 id: 49269-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16225
ADNO: 914 464L
AUTH: FENIGER E.J. ; GAMBILL B.
CLSS: U
CCDE: WRECS V
CONN: DCA 100 72 C 0031
CORP: GE TEMPO (SANTA BARBARA, CA.)
DATE: 7308

DESC: CODE
DESC: Nuclear Weapon Effects Communications Systems MF HF L1
REPN: 73 TMP 15 VOL. 1
SUJO: 2-322-200
TITL: WRECS V--A FORTRAN CODE FOR COMPUTATION OF WEAPON RADIATION EFFECTS
ON COMMUNICATIN SYSTEMS; VOL. 1, USER'S GUIDE (U), 82 P., (U)

.block
16225
.endblock

.block
copy: 1 id: 49280-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16226
ADNO: 527130
AUTH: GAMBILL B. ; RUTHERFORD R.
CLSS: SFRD
CCDE: WRECS V ; WEPH V
CONN: DCA 100 72 C 0031
CORP: GE TEMPO (SANTA BARBARA, CA.)
DATE: 7308
DESC: Nuclear Weapon Effects EM Propagation refraction multipath L1 LF VLF
HF

DESC: Nuclear Weapon Effects Communications Systems MF HF L1 MULTI TRUNK
MODEL

DESC: Nuclear Weapon Environment Induced Fireball Thermal Noise Antenna
Excess Temperature L1

REPN: 73 TMP 15 VOL. 2
TSHO: MULTIPLE
SUJO: 2-321-200 ; 2-322-200 ; 2-410-000
TEMP: A3951
TITL: WRECS V--A FORTRAN CODE FOR COMPUTATION OF WEAPON RADIATION EFFECTS
ON COMMUNICATION SYSTEMS; VOL. 2, COMPUTATIONAL MODELS (U), 194 P.,
(SFRD)

.block
16226
.endblock

.block
copy: 1 id: 49281-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16251
AUTH: SIMMONS G.L. ; HUBBELL J.H.
CLSS: U
CONN: DNA EO 72 804
CORP: SCIENCE APPLICATIONS, INC. (HUNTSVILLE, AL.) ; NATIONAL BUREAU OF
STANDARDS, CENTER FOR RADIATION RESEARCH (WASH., D.C.)
DATE: 7307
DESC: Cross Sections x-ray L1
DESC: TABULAR

DESC: Cross Sections gamma L1
REPN: NBSIR 73 241
SUJO: 9-830-000 ; 9-840-000
TITL: COMPARISON OF PHOTON INTERACTION CROSS SECTION DATA SETS. VII.
BIGGS-LIGHTHILL (REV.) AND ENDF/B (U), 90 P., (U)

TREE: 413 ; 411

.block

16251

.endblock

.block

copy: 1 id: 49302-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16287

AUTH: READY J.M.

CLSS: U

CORP: NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER (BETHESDA, MD.)

DATE: 7309

DESC: THEORY EXPERIMENTAL

DESC: thermal protection L1

DESC: Simulation Facilities Techniques thermal optical L5

SUJO: 4-280-000 ; 9-870-000

TITL: TEST OF WATER SPRAY FOR USE AS PROTECTION AGAINST THERMAL RADIATION
(U), 40 P., (U)

.block

16287

.endblock

.block

copy: 1 id: 49332-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16304

AUTH: MANHEIMER W.M. ; OTT E.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., D.C.)

DATE: 7305

DESC: THEORY

DESC: Plasma Physics MHD fusion L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1

REPN: NRL MR 2588 ; PACE 36

SUJO: 3-312-220 ; 9-500-000

TITL: THEORY OF MICROWAVE GENERATION BY AN INTENSE RELATIVISTIC ELECTRON
BEAM IN A RIPPLED MAGNETIC FIELD (U), 57 P., (U)

.block

16304

.endblock

.block

copy: 1 id: 49344-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16486
ADNO: 525794L
AUTH: BREUCH R.A. ; JUNG A F.A. ; NELSON E.D.
CLSS: SRD
CONN: F 04701 72 C 0334
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7302
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: SIMULATION (E BEAM) ; EXPERIMENTAL
EFFT: X-RAY ; THERMAL
REPN: LMSC B305334 ; SAMSO TR 73 92
SUJO: 3-133-000 ; 4-231-000
TEMP: A4326
TITL: RADIATION EFFECTS ON PASSIVE OPTICAL SENSOR COMPONENTS (U), 64 P.,
(SRD)
TREE: 361

.block

16486

.endblock

.block

copy: 1 id: 49432-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16507
ADNO: 525998L
AUTH: KALMA A.H. ; LEADON R.E. ; NABER J.A.
CLSS: S
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7303
DESC: SIMULATION (LINAC) ; THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: test instruments IR L5
EFFT: TREE
REPN: GULF RT A11134
SUJO: 3-133-000 ; 4-383-000
TEMP: A4372
TITL: DETECTOR RADIATION DAMAGE EFFECTS (U), CA. 300 P., (S)
TREE: 364

.block

16507

.endblock

.block

copy: 1 id: 49445-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16539

ABS: Prediction capabilities are reviewed to determine whether they are suitable for describing the fallout radiation hazards that may exist in tactical nuclear battlefield situations. One aspect of fallout predictability is illustrated by a collection of aberrant results from nuclear tests conducted under fairly stabilized conditions? there are a number of warnings about the confidence that should be placed on prediction schemes derived from nuclear test shots. A comparison of current fallout models shows uncertainties including wind, terrain, rainout, and cloud parameters. Some consequences of depending upon faulty predictions are serious. The search for the best-of-all-possible prediction schemes will not lead to fruitful results because of the complexities involved?

ABS: a set of limits to the upper and lower bounds to expected fallout should be adopted as a practical means of using prediction schemes for tactical warfare. It is emphasized that there is no substitute for hard data and that a computerized radiation data collection, reduction, and display system should be contemplated to satisfy the need to respond to fallout problems on the battlefield.

AUTH: SCHIFF A.

CLSS: U

CCDE: DELFIC ; PROFET ; SEER ; KDFOC ; WEDS ; NRDL-D ; ARMY

CONN: W 7405 ENG 48

CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)

DATE: 7308

DESC: COMPUTER SIMULATION ; SUMMARY SURVEY

DESC: Nuclear Weapon Environment fallout intensity contours patterns L1
COMPARES CODES DOSE ESTIMATES TABLE TOP CALCULATION MODEL IN
APPENDIX

DESC: Nuclear Warfare Theater operations scenarios battlefield environment
L1

DESC: Nuclear Warfare Theater Survivability Security Safety L1 ANALYTICAL
DISCUSSION OF DOSE EXPOSURE RISK LEVELS

EFFT: GAMMA

REPN: UCRL 51440

TSHO: LOW-ALT

SUJO: 2-225-100 ; 3-411-200 ; 3-412-100

TITL: PROBLEMS WITH PREDICTING FALLOUT RADIATION HAZARD IN TACTICAL
BATTLEFIELD SITUATIONS (U), 32 P., (U)

TNFF: 4860

.block

16539

.endblock

.block

copy: 1 id: 49472-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16544

AUTH: AZAREWICZ J.L. ; BERGER R.A. ; COLWELL J.F. ; GREEN B.A. ; FLANAGAN
T.M. ; KALMA A.H. ; LEADON R.E. ; MALLON C.E. ; NABER J.A. ; O'KEEFE
D.R. ; WILKENFELD J.M.

CLSS: U

CONN: DAAG 39 68 C 0060
CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)
DATE: 7307
DESC: SIMULATION (LINAC) ; THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: TREE
REPN: HDL TR 060 2 ; 8044 001
SUJO: 3-221-000
TTTL: TRANSIENT RADIATION EFFECTS RESEARCH (U), 194 P., (U)
TREE: 200

.block

16544

.endblock

.block

copy: 1 id: 49475-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16568
ADNO: 911687L
AUTH: CRISCIONE E.S. ; HUGHES P.S. ; RIGDON L.D.
CLSS: U
CCDE: TRAP ; NOVA ; HELP
CORP: KAMAN AVIDYNE (BURLINGTON, MA.) ; NAVAL WEAPONS EVALUATION FACILITY
(ALBUQUERQUE, N.M.)
DATE: 7305
DESC: Nuclear Weapon Effects flight systems helicopters L5
DESC: Nuclear Test Simulation Field Programs experiment design aerospace
systems L1 HELICOPTER
EFFT: THERMAL ; AIR-BLAST
REPN: NWEF 1103
SUJO: 3-118-000 ; 4-829-100
TTTL: NUCLEAR SURVIVABILITY TEST AND ANALYSIS PLAN FOR THE HEAVY LIFT
HELICOPTER (HLH) AIRBLAST AND THERMAL RADIATION (U), 55 P., (U)

.block

16568

.endblock

.block

copy: 1 id: 49488-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16572
AUTH: BEVERLY W.B.
CLSS: U
CCDE: SAMCEP
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7309
DESC: Cross Sections neutron L1
DESC: Radiation Transport neutron L1
DESC: TABULAR

REPN: BRL R 1666
SUJO: 9-650-000 ; 9-820-000
TITL: SENSITIVITY OF THE TRANSPORT OF 14-MEV NEUTRONS TO THE SHAPE OF THE
NITROGEN ELASTIC ANGULAR DISTRIBUTION (U), 79 P., (U)

TREE: 970

.block

16572

.endblock

.block

copy: 1 id: 49491-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16577

CLSS: U

CORP: PICATINNY ARSENAL

DATE: 7307

DESC: Nuclear Weapon Environment X-ray Output energy spectrum L1 NAMOGRAMS
RELATING FLUX, TEMPERATURE, ETC.

DESC: CALCULATOR

EFFT: X-RAY

SUJO: 1-620-000

TITL: DENEM NUCLEAR RADIATION CALCULATOR (U), 1 P., (U)

.block

16577

.endblock

.block

copy: 1 id: 49494-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16597

AUTH: COWETT P.M. JR. ; WESTER J.W.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., D.C.)

DATE: 7307

DESC: Nuclear Weapon Effects electronic subsystems analysis circuit
network L1

DESC: SIMULATION (PULSED REACTOR) ; EXPERIMENTAL

EFFT: TREE

REPN: HDL TM 73 5

SUJO: 3-219-000

TITL: SIMPLE NUCLEAR RADIATION HARDENED DC-TO-DC CONVERTER (U), 25 P., (U)

TREE: 389

.block

16597

.endblock

.block

copy: 1 id: 49500-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16662
ADNO: 526160L
AUTH: MOONEY L.G. ; SWANSON R.L.
CLSS: SRD
CCDE: ARC ; MEVDP
CONN: DASA 01 71 C 0120
CORP: RADIATION RESEARCH ASSOCIATES, INC. (FT. WORTH, TX.)
DATE: 7301
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L9 PP 11
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1

WITHIN AIRCRAFT

DESC: THEORY
REPN: RRA N7302
SHOT: WASP
SUJO: 1-120-000 ; 3-312-100
SYST: F-106B
TEMP: A4521
TITL: ARC ANALYSIS OF F-106B (U), 15 P., (SRD)

.block

16662

.endblock

.block

copy: 1 id: 49568-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16743
AUTH: REXROAD R.E. ; JACOBSON J.R.
CLSS: U
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7310
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1
DESC: Nuclear Weapon Effects structures field fortifications L1
DESC: COVERED AND UNCOVERED FOXHOLES ; EXPERIMENTAL
EFFT: NEUTRON
REPN: BRL R 1681
SUJO: 3-140-000 ; 4-140-000
TITL: OPERATION HENRE; EXPERIMENTAL STUDIES OF THE NEUTRON AND GAMMA
SHIELDING PROVIDED BY FIELD FORTIFICATIONS FROM A 14-MEV NEUTRON
SOURCE (U), 97 P., (U)

.block

16743

.endblock

.block

copy: 1 id: 49634-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16761
ADNO: 766140
AUTH: VERSER F.A. ; DONNERT H.J.

CLSS: U
CCDE: GADJET ; SAND ; DANCUF
CONN: DAHC 20 71 C 0305
CORP: KANSAS STATE UNIV. (MANHATTAN, KS.)
DATE: 7309
DESC: SIMULATION (CO-60) ; THEORY
DESC: Radiation Transport gamma L1
DESC: Nuclear Weapon Effects structures aboveground buildings L5
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L5
AREAL DISTRIBUTION TO DOSE RATE AT 3 FEET
EFFT: GAMMA ; FALLOUT
REPN: KEES SR 113
SUJO: 2-223-200 ; 3-251-000 ; 9-620-000
TITL: VALIDITY OF SCALE-MODELING FOR GAMMA-RAY ATTENUATION (U), 179 P.,
(U)

.block

16761

.endblock

.block

copy: 1 id: 49646-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16806
AUTH: OBLOW E. ; KIN K. ; GOLDSTEIN H. ; WAGSHAL J.J.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7312
DESC: THEORY
DESC: Radiation Transport neutron L1
REPN: ORNL TM 4408
SUJO: 9-650-000
TITL: EFFECTS OF HIGHLY ANISOTROPIC SCATTERING ON MONOENERGETIC NEUTRON
TRANSPORT AT DEEP PENETRATIONS (U), 38 P., (U)
TREE: 980

.block

16806

.endblock

.block

copy: 1 id: 49684-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16807
AUTH: MCGREGOR B.J. ; MYNATT F.R.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7312
DESC: Radiation Transport gamma L1
DESC: EXPERIMENTAL

REPN: ORNL TM 4266
SUJO: 9-620-000
TITL: EFFECTS OF AIR-DENSITY PERTURBATIONS ON THE TRANSPORT OF GAMMA RAYS
PRODUCED BY POINT GAMMA-RAY SOURCES (U), 21 P., (U)
TREE: 960
.block
16807
.endblock
.block
copy: 1 id: 49685-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16808
AUTH: BUCHER W.P. ; HOLLANDSWORTH C.E. ; LAMOREAUX R.D.
CLSS: U
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7310
DESC: Radiation Transport neutron L1
DESC: EXPERIMENTAL
REPN: BRL R 1680
SUJO: 9-650-000
TITL: NEW APPROACH TO THE MEASUREMENT OF THE SMALL-ANGLE SCATTERING OF
FAST NEUTRONS (U), 51 P., (U)
TREE: 970
.block
16808
.endblock
.block
copy: 1 id: 49686-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16809
AUTH: VAN PAASSEN H.L.L. ; VANDRE R.H.
CLSS: U
CONN: F 04701 73 C 0074
CORP: AEROSPACE CORP. (EL SEGUNDO, CA.)
DATE: 7311
DESC: EXPERIMENTAL
DESC: Simulation Facilities Techniques x-ray effects L1
REPN: TR 0074 (4124) 1 ; SAMSO TR 73 362
SUJO: 4-231-000
TITL: DESCRIPTION AND OPERATION OF THE MARK 1B PLASMA FOCUS RADIATION
FACILITY (U), 22 P., (U)
TREE: 642
.block
16809
.endblock
.block
copy: 1 id: 49687-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

DESC: Shielding Protection L1
REPN: ORNL TM 4335
SUJO: 9-800-000
TITL: RADIATION TRANSPORT CROSS-SECTION SENSITIVITY ANALYSIS -A GENERAL
APPROACH ILLUSTRATED FOR A THERMONUCLEAR SOURCE IN AIR (U), 79 P.,
(U)

.block

16847

.endblock

.block

copy: 1 id: 49710-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16894
AUTH: LICHTENSTEIN H. ; STEINBERG H.
CLSS: U
CCDE: SAMCEP ; SAM-CE
CONN: DAAD 05 73 C 0072
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (WHITE PLAINS, N.Y.)
DATE: 7306
DESC: Nuclear Weapon Environment Prompt Neutrons L1
DESC: Radiation Transport neutron L1
DESC: CORRELATED NEUTRON TRANSPORT CODE EXTENSION OF SAM-CE ; CODE
REPN: BRL CR 109
SUJO: 1-100-000 ; 9-650-000
TITL: SAMCEP CODE WITH BOUNDED FLUX AT A POINT ESTIMATION (U), 191 P., (U)
TREE: .970

.block

16894

.endblock

.block

copy: 1 id: 49748-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 16895
AUTH: RHOADES W.A. ; MYNATT F.R.
CLSS: U
CCDE: DOT III (NEUTRON AND GAMMA TRANSPORT) ; ORNL
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7309
DESC: THEORY CODE
DESC: Cross Sections neutron L1
DESC: Radiation Transport neutron L1
DESC: Radiation Transport gamma L1
REPN: ORNL TM 4280
SUJO: 9-620-000 ; 9-650-000 ; 9-820-000
TITL: DOT III TWO-DIMENSIONAL DISCRETE ORDINATES TRANSPORT CODE (U), CA.
100 P., (U)
TREE: 960 ; 970

.block
16895
.endblock

.block
copy: 1 id: 49749-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16978
AUTH: DOWLER T.W. ; SANDMEIER H.A.
CLSS: SRD
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM)
DATE: 7311
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1 DOSE
OUTPUT COMBINED NEUTRON GAMMA
DESC: TABULAR
REPN: LA 5388
SUJO: 3-312-100
TEMP: A4720
TITL: RADIATION ENVIRONMENTS FROM TACTICAL NUCLEAR WEAPONS (U), '23 P.,
(SRD)

.block
16978
.endblock

.block
copy: 1 id: 49815-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16990
AUTH: PEFFLEY W.M. ; BUCK J.S. ; STRASSER K.A. ; BIDDLE J.G.
CLSS: U
CONN: F 04701 73 C 0043
CORP: HUGHES AIRCRAFT CO. (CULVER CITY, CA.)
DATE: 7308
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 PMOS
DESC: Simulation Facilities Techniques TREE L1
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1
DESC: SIMULATION (FLASH X-RAY COBALT 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
LOW AND MEDIUM POWER IC LINEAR IC
EFFT: GAMMA
REPN: SAMSO TR 73 251
SUJO: 3-221-000 ; 3-222-000 ; 4-241-000 ; 4-272-000
TITL: RADIATION TEST PROGRAM (U), 75 P., (U)
TREE: 325 ; 642

.block
16990
.endblock

.block
copy: 1 id: 49824-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16992
ADNO: 773 736
AUTH: CLARK A.V. JR.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., D.C.)
DATE: 7312
DESC: Nuclear Weapon Effects ship systems submarines L1 COMPUTATION OF
RADIATION PRESSURE ON SUBMARINE APPENDAGES
DESC: THEORY
EFFT: WATER SHOCK
REPN: NRL R 7590
SUJO: 3-121-000
TITL: STUDY OF FLUID-STRUCTURE INTERACTION AND DECOUPLING APPROXIMATIONS
(U), 30 P., (U)

.block
16992
.endblock

.block
copy: 1 id: 49825-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16996
AUTH: HORNE W.E. ; MADARAS B.K.
CLSS: U
CONN: F 33615 71 C 1583
CORP: BOEING AEROSPACE CO. (SEATTLE, WASH.)
DATE: 7310
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts solar cells L1 MAINLY
SPACE RADIATION BUT NOTE ON WEAPON RADIATION
REPN: D180 10491 3 ; AFAPL TR 72 69 VOL. 2
SUJO: 3-223-000
TITL: REAL-TIME SPACE AND NUCLEAR EFFECTS ON SOLAR CELLS (ACCELERATED
EVALUATION METHODS) (U), 113 P., (U)
TREE: 362

.block
16996
.endblock

.block
copy: 1 id: 49826-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 16997
ADNO: 913236L

AUTH: HOGGINS J.T. ; SHARP A.L.
CLSS: U
CCDE: SPEC (THERMAL-AFWL)
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, N.M.)
DATE: 7308
DESC: Nuclear Weapon Environment Ultraviolet Output energy spectrum L1
DESC: THEORY
DESC: Nuclear Weapon Environment Visible Output energy spectrum L1
DESC: Nuclear Weapon Environment Infrared Output energy spectrum L1
REPN: AFWL TR 73 152
TSHO: LOW-ALT ; HI-ALT
SUJO: 1-320-000 ; 1-420-000 ; 1-520-000
TTTL: SPECTRAL CHARACTERISTICS OF THERMAL RADIATION PREDICTED FROM SPUTTER
CALCULATION (U), 100 P., (U)

.block

16997

.endblock

.block

copy: 1 id: 49827-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17002

AUTH: LONERGAN J.A.

CLSS: U

CONN: DAN 001 73 C 0206

CORP: SCIENCE APPLICATIONS, INC. (ROLLING MEADOWS, IL.)

DATE: 7403

DESC: THEORY

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors

vacuum tubes dielectrics relays switches L1 CAPACITORS

EFFT: TREE

REPN: SAI 120 74 01 CH

SUJO: 3-229-000

TTTL: ELECTRICAL RESPONSE OF TANTALUM CAPACITORS TO RADIATION (U), 20 P.,
(U)

TREE: 370

.block

17002

.endblock

.block

copy: 1 id: 49831-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17004

ADNO: 911497L

AUTH: FLANAGAN T.M.

CLSS: U

CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)

DATE: 7303

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors

vacuum tubes dielectrics relays switches L1 CAPACITORS

DESC: SIMULATION (LINAC REACTOR) ; EXPERIMENTAL

EFFT: TREE

REPN: GULF RT C12566

SUJO: 3-229-000

TITL: EFFECTS OF IONIZING RADIATION ON TANTALUM CAPACITORS (U), 117 P.,
(U)

TREE: 370

.block

17004

.endblock

.block

copy: 1 id: 49833-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17014

ADNO: 527213L

AUTH: GERSTLE J.H. ; DAVIES F.W.

CLSS: C

CCDE: CHAP (THERMAL LOADING) BOEING

CORP: BOEING AEROSPACE CO. (SEATTLE, WASH.)

DATE: 7309

DESC: Material Properties Plastics Resins L1 SPECIFIC HEAT POISSONS RATIO
FIBERGLAS

DESC: Nuclear Weapon Effects missile systems strategic propulsion L5
MINUTEMAN MOTORCASE

DESC: SIMULATION (ELECTRON BEAM ACCELERATOR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects materials plastics resins L5 EPOXY RESIN

EFFT: X-RAY

REPN: D2 19914 3

SHOT: MISTY NORTH ; DIAMOND SCULLS

SUJO: 3-112-140 ; 3-244-000 ; 7-540-000

SYST: MINUTEMAN

TEMP: A4766

TITL: RADIATION EFFECTS ON MECHANICAL PROPERTIES OF FIBERGLAS (U), 97 P.,
(C)

.block

17014

.endblock

.block

copy: 1 id: 49841-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17021

AUTH: ABBOTT L.S.

CLSS: U

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7307

DESC: Nuclear Weapon Effects structures underground tunnels L1

DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear

radiation transport L1

DESC: Radiation Transport neutron L1
DESC: Nuclear Weapon Effects structures underground L1 MISSILE SILO
DESC: SURVEY
DESC: Nuclear Weapon Effects structures underground structures lined L1
DESC: Radiation Transport gamma L1
REPN: ORNL RSIC 36
SUJO: 3-261-000 ; 3-262-000 ; 3-264-000 ; 4-140-000 ; 9-620-000 ;
9-650-000
TITL: SHIELDING AGAINST INITIAL RADIATIONS FROM NUCLEAR WEAPONS (A
STATE-OF-THE-ART REPORT ON SHIELD DESIGN TECHNIQUES) (U), 176 P.,
(U)

TREE: 411 ; 412

.block

17021

.endblock

.block

copy: 1 id: 49848-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17029

ADNO: 758449

AUTH: BEVERLY W.B. ; ENGBRETSON A.C.

CLSS: U

CCDE: SAMCEP

CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)

DATE: 7302

DESC: THEORY TABULAR

DESC: Radiation Transport neutron L1 IN NITROGEN

REPN: BRL R 1633

SUJO: 9-650-000

TITL: CORRELATED SAMPLING MONTE CARLO NEUTRON TRANSPORT USING
SAMCEP--THREE STUDIES (U), 70 P., (U)

TREE: 970

.block

17029

.endblock

.block

copy: 1 id: 49856-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17060

ABS: An examination of aspects of NATO's tactical nuclear capabilities as
they relate to their credible use against Warsaw Pact targets, with
emphasis on civilian collateral damage and its relation to nuclear
weapon selection. The utility is compared of blast effects versus
prompt nuclear radiation as these effects relate to appropriate
weapon selection. Both current fission weapons and advanced classes
of weapons that maximize prompt radiation effects are compared.

ADNO: 527997

AUTH: COHEN S.T.
CLSS: SRD
CORP: RAND CORP. (SANTA MONICA, CA.)
DATE: 7307
DESC: Nuclear Weapon Environment fallout down fraction L9 P. 16 RAINOUT
FRACTION
DESC: Nuclear Weapon Effects land transport armored vehicles L9 P. 8 BLAST
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
RADIATION CASUALTY CRITERIA P. 5
DESC: THEORY
DESC: Nuclear Warfare Theater collateral damage bonus damage L1 COLLATERAL
DAMAGE
DESC: Nuclear Weapon Effects on animals blast shock L9 P. 8 BLAST
EFFT: NEUTRON ; GAMMA ; AIR-BLAST
REPN: R 1249 ARPA
SUJO: 2-225-200 ; 3-151-000 ; 3-311-000 ; 3-312-100 ; 3-412-500
TEMP: A4858
TITL: TACTICAL IMPLICATIONS OF RADIATION KILL CRITERIA (U), 31 P., (SRD)
TNFF: 4820 ; 4850

.block

17060

.endblock

.block

copy: 1 id: 49882-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17081
AUTH: LEHTO D.L.
CLSS: C
CCDE: INRADS (SHIP SHIELDING) RRA
CORP: NAVAL ORDNANCE LAB. (WHITE OAK, MD.)
DATE: 7311
DESC: Nuclear Weapon Effects ship systems surface ships L1 DLGN-38 RAD
LEVELS WITHIN SHIP
DESC: THEORY
EFFT: NEUTRON ; GAMMA
REPN: NOLTR 73 158
SUJO: 3-122-000
TEMP: A4681
TITL: CALCULATED RADIATION ENVIRONMENT IN THE DLGN-38 SHIP DUE TO A NEARBY
NUCLEAR EXPLOSION (U), 45 P., (C)

.block

17081

.endblock

.block

copy: 1 id: 49895-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17088-063
AUTH: ROSSMAN R. ; HUNTINGTON J.H. ; BILLS K.W.

CLSS: SRD
CONN: F 04611 69 C 0062
CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA.) ; AEROJET SOLID
PROPULSION CO. (SACRAMENTO, CA.)
DATE: 7310
DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects missile systems ABM propulsion L1 MOTOR
CASE-PROPELLANT BOND
EFFT: X-RAY
SUJO: 3-112-240
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUP FOR PROPULSION AND ORDNANCE SYSTEM; VOL. 3
TTTL: PULSED RADIATION DAMAGE TO A TITANIUM MOTORCASE-TO-PROPELLANT BONDED
STRUCTURE (U), 42 P., (SRD)

.block

17088-063

.endblock

.block

copy: 1 id: 49900-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17088-243
AUTH: MCSWAIN J. ; PAITCHEL H.
CLSS: SRD
CORP: GENERAL ELECTRIC TEMPO (SANTA BARBARA, CA.) ; PICATINNY ARSENAL
(DOVER, N.J.)
DATE: 7310
DESC: Nuclear RDT&E Research Program Descriptions integrated effects
system studies L1
SUJO: 4-160-000
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUP FOR PROPULSION AND ORDNANCE SYSTEM; VOL. 3
TTTL: REPORTING PEP RADIATION EFFECTS INFORMATION (U), 11 P., (SRD)

.block

17088-243

.endblock

.block

copy: 1 id: 49904-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17088-255
AUTH: LEWIS H.N. ; NELSON C.W. ; BARROWS A.W. JR.
CLSS: SRD
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7310
DESC: SIMULATION (APRF) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects missile systems ABM propulsion L1 CMBD
IRRADIATION EFFECTS ON BURN RATE
DESC: Nuclear Weapon Effects ordnance propellants solid L1
EFFT: NEUTRON

SUJO: 3-112-240 ; 3-164-000
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUP FOR PROPULSION AND ORDNANCE SYSTEM; VOL. 3
SYST: SPRINT
TITL: NEUTRON RADIATION EFFECTS ON SPRINT TYPE SOLID PROPELLANT BURNING
(U), 15 P., (SRD)

.block

17088-255

.endblock

.block

copy: 1 id: 49905-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17103
ADNO: 527228L
AUTH: FRIEDBERG R. ; HUGHES P.S. ; RIGDON L.D.
CLSS: U
CORP: NAVAL WEAPONS EVALUATION FACILITY (ALBUQUERQUE, N.M.)
DATE: 7307
DESC: Nuclear Weapon Effects missile systems tactical L1 GLASS EPOXY AND
ALUMINUM SHELLS
EFFT: THERMAL ; AIR-BLAST
REPN: NWEF 1108
SUJO: 3-112-300
SYST: STANDARD MISSILE
TEMP: A4676
TITL: STANDARD MISSILE--ANALYTIC TECHNIQUES FOR NUCLEAR AIRBLAST AND
THERMAL RADIATION COUPLING (U), 76 P., (C)

.block

17103

.endblock

.block

copy: 1 id: 49924-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17158
AUTH: ARNOLD W.D. ; SALMON R. ; LIN K.H. ; DE LAGUNA W.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7304
DESC: Nuclear Energy Peaceful Applications radiation problems L1
DESC: Environmental Impact Assessments EIS Supporting Data L1
DESC: Nuclear Energy Peaceful Applications resource production gas L1
DESC: THEORY
REPN: ORNL TM 4024
SUJO: 3-480-400 ; 3-483-100 ; 4-870-200
TITL: PRELIMINARY EVALUATION OF METHODS FOR THE DISPOSAL OF TRITIATED
WATER FROM NUCLEARLY STIMULATED NATURAL GAS WELLS (U), 49 P., (U)

.block

17158
.endblock
.block
copy: 1 id: 49970-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17160
AUTH: COLWELL J.F. ; GREEN B.A. ; LEADON R. ; MALLON C.E. ; NABER J.A.
CLSS: U
CONN: F 19628 72 C 0311
CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)
DATE: 7312
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 HG CD TE ELECTRICAL AND OPTICAL
CHARGES
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
REPN: AFCRL TR 73 0761 ; INTEL RT 8027 004
SUJO: 3-133-000
TITL: STUDY OF THE EFFECTS OF RADIATION ON THE ELECTRICAL AND OPTICAL
PROPERTIES OF HGCDTE (U), 68 P., (U)
TREE: 200 ; 361

.block
17160
.endblock
.block
copy: 1 id: 49972-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17172
AUTH: BAUM S.J. ; SKIDMORE W.D. ; EKSTROM M.E.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)
DATE: 7312
DESC: Nuclear Weapon Effects on animals RF microwave L1
DESC: EXPERIMENTAL
EFFT: EMP
EMPF: 500
REPN: AFRRI SR73 23
SUJO: 3-314-000
SYMJ: ALSO PUBLISHED IN HEALTH PHYSICS, VOL. 26, P. 391-398, MAY, 1974.
TITL: CONTINUOUS EXPOSURE OF RODENTS TO 10 PULSES OF ELECTROMAGNETIC
RADIATION (U), 19 P., (U)

.block
17172
.endblock
.block
copy: 1 id: 49975-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17184

ABS: The objectives of the work reported herein are to gather, organize, and interpret information regarding the following aspects of fallout radiation in battlefield situations : (1) how the operational capabilities of U.S. Combat forces can be affected, (2) the fallout assessment equipment and information required to return U.S. Combat forces capability to acceptable levels, (3) current U.S. Combat forces capability to respond to battlefield fallout situations, including areas of potential improvement, (4) the utility of a system having fallout sensing, communication, processing, and display elements, and (5) the desirable characteristics of deployment, sensors, communications, data reduction, and displays for a system for radiation hazard assessment.

AUTH: LEE H. ; MILLICAN R.W. ; HARDMAN W.F.

CLSS: U

CONN: AT (04 3) 115

CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA.)

DATE: 7311

DESC: Nuclear Warfare Theater Survivability Security Safety L1 MONITORING, SURVEYING, AND COMMUNICATING FALLOUT DATA FOR TACTICAL ARMY DEPLOYMENT

EFFT: FALLOUT

REPN: UCRL 13591

SUJO: 3-412-100

TITL: PRESENT AND FUTURE CAPABILITIES FOR BATTLEFIELD RADIATION HAZARD ASSESSMENT (U), 120 P., (U)

TNFF: 4720

.block

17184

.endblock

.block

copy: 1 id: 49985-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17195

AUTH: ARIMURA I.

CLSS: U

CONN: F 29601 71 C 0001

CORP: BOEING CO. (SEATTLE, WASH.)

DATE: 7401

DESC: SIMULATION (LINAC) ; THEORY

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes silicon-controlled rectifiers L1

DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability L1

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: AFWL TR 73 134 VOL. 1

SUJO: 3-221-000 ; 3-222-000 ; 4-170-000

TITL: STUDY OF ELECTRONICS RADIATION HARDNESS ASSURANCE TECHNIQUES; VOL. 1, BACKGROUND, APPROACH, AND SUMMARY OF RESULTS (U), 148 P., (U)

TREE: 310 ; 320 ; 610

.block

17195

.endblock

.block

copy: 1 id: 49992-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17196

AUTH: ARIMURA I.

CLSS: U

CONN: F 29601 71 C 0001

CORP: BOEING CO. (SEATTLE, WASH.)

DATE: 7401

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: SIMULATION (LINAC) ; THEORY EXPERIMENTAL

EFFT: TREE

REPN: AFWL TR 73 134 VOL. 3

SUJO: 3-221-000 ; 3-222-000

TITL: STUDY OF ELECTRONICS RADIATION HARDNESS ASSURANCE TECHNIQUES; VOL.
3, LOT SAMPLING AND IRRADIATE-AND-ANNEAL (U), 198 P., (U)

TREE: 610 ; 310 ; 320

.block

17196

.endblock

.block

copy: 1 id: 49993-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17197

AUTH: SROUR J.R. ; CURTIS O.L. ; OTHMER S. ; CHIU K.Y. ; DEOKAR V.D.

CLSS: U

CONN: DAAG 39 73 C 0171

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER CORPORATE LABS. (HAWTHORNE,
CA.)

DATE: 7312

DESC: SIMULATION (FLASH X-RAY, GAMMA, NEUTRON SOURCES) ; THEORY
EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: HDL TR 171 4 ; NRTC 73 46R

SUJO: 3-222-000

TITL: RADIATION EFFECTS ON SEMICONDUCTOR MATERIALS AND DEVICES (U), 276
P., (U)

TREE: 200

.block

17197

.endblock

.block

copy: 1 id: 49994-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17198
ADNO: 914788L
AUTH: MANLEY O.P. ; SMITH H.J.P. ; TREVE Y.M. ; DEGGES T.C. ; CARPENTER
J.W. ; FRANKENTHAL S. ; DUBE D. ; ENGLADE R.
CLSS: U
CCDE: OPTIR (OPTICAL RADIATION) VISIDYNE ; GCHEM (REACTION RATES) VISIDYNE
CONN: F 19628 71 C 0212
CORP: VISIDYNE, INC. (BURLINGTON, MA.)
DATE: 7306
DESC: Nuclear Weapon Environment Infrared Output L1
DESC: Nuclear Weapon Environment Visible Output L1
DESC: Nuclear Weapon Phenomenology ionospheric waves heave gravity waves
L1
DESC: Nuclear Weapon Phenomenology Fireball Chemistry L1
DESC: THEORY CODE
REPN: VI 183 ; AFCRL TR 73 0565
SUJO: 1-300-000 ; 1-400-000 ; 2-160-000 ; 2-618-000
TITL: MODELING OF OPTICAL IR BACKGROUNDS (U), 226 P., (U)

.block
17198
.endblock
.block

copy: 1 id: 49995-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17253
ADNO: 527579
AUTH: KULANDER J.L. ; MEYEROTT R.E. ; BENSON R.S. ; LANDSHOFF R.K.
CLSS: CFRD
CONN: F 19628 71 C 0184
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7305
DESC: Nuclear Weapon Environment Ultraviolet Output rate L1
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1 TEMPERATURE
DESC: Nuclear Weapon Environment Visible Output rate L1
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1
DESC: THEORY EXPERIMENTAL
REPN: LMSC D009845 ; AFCRL TR 73 0536
SHOT: CHECKMATE
TSHO: HI-ALT
SUJO: 1-440-000 ; 1-540-000 ; 2-130-000 ; 2-211-000
TEMP: A7375
TITL: CHECKMATE VISIBLE RADIATION STUDY (U), 120 P., (CFRD)

.block
17253

.endblock

.block

copy: 1 id: 50037-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17254
ADNO: 526956L
AUTH: SWIFT R.
CLSS: S
CONN: DAHC 60 72 C 0079
CORP: AMERICAN SCIENCE AND ENGINEERING, INC. (CAMBRIDGE, MA.)
DATE: 7306
DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1
DESC: SIMULATION (THERMAL LAMP) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: THERMAL
REPN: ASE 3277
TSHO: LOW-ALT
SUJO: 3-133-000 ; 3-224-000
TEMP: A4856
TITL: THERMAL RADIATION VULNERABILITY OF AN OPTICAL SENSOR FOCAL PLANE
(U), 60 P., (S)

.block

17254

.endblock

.block

copy: 1 id: 50038-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17259
AUTH: AVRAMI L. ; JACKSON H.J. ; KIRSHENBAUM M.S.
CLSS: U
CORP: PICATINNY ARSENAL (DOVER, N.J.)
DATE: 7312
DESC: Nuclear Weapon Effects ordnance explosives L1 ENERGY DEGRADATION
TACOT TATB DATB HMX TETRYL TNB TNT RDX PETN NGU BARIUM AZIDE
DESC: SIMULATION (CO60) ; EXPERIMENTAL
EFFT: GAMMA
REPN: PA TR 4602
SUJO: 3-163-000
TITL: RADIATION-INDUCED CHANGES IN EXPLOSIVE MATERIALS (U), 78 P., (U)

.block

17259

.endblock

.block

copy: 1 id: 50043-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17260
AUTH: CHADSEY W.L.
CLSS: U
CCDE: POEM (SGEMP) SAI
CONN: N 00164 73 C 0517
CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA.)
DATE: 7310
DESC: Radiation Transport electron L5
DESC: test instruments electronic vulnerability TREE L1
DESC: TABULAR
EFFT: IEMP
EMPF: 393
REPN: NAD TR/7024/C74/64 ; SAI 73 567 AR
SUJO: 4-372-000 ; 9-680-000
TITL: MONTE CARLO CALCULATIONS OF DOSE DISTRIBUTION IN SEM IRRADIATED
SEMICONDUCTOR STRUCTURES (U), 40 P., (U)

.block

17260

.endblock

.block

copy: 1 id: 50044-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17267
ADNO: 771324
AUTH: BEER M. ; COHEN M.O.
CLSS: U
CONN: DAHC 20 73 C 0201
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, N.Y.)
DATE: 7311
DESC: THEORY
DESC: Cross Sections gamma L1 INSIDE CONCRETE BUILDINGS
REPN: MR 7037
SUJO: 9-830-000
TITL: INITIAL GAMMA RADIATION DOSE IN FIVE CONCRETE STRUCTURES (U), 38 P.,
(U)
TREE: 411

.block

17267

.endblock

.block

copy: 1 id: 50051-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17270
ADNO: 766889
AUTH: YINGLING W.A.
CLSS: U

CORP: AIR FORCE INSTITUTE OF TECHNOLOGY (WRIGHT-PATTERSON AFB, OH.)
DATE: 7306
DESC: THEORY
DESC: Radiation Transport neutron L1
REPN: DS/PH/73 1
SUJO: 9-650-000
TITL: TIME-DEPENDENT TRANSPORT VIA THE CONTINUED FRACTION APPROXIMATION
(U), 115 P., (U)

TREE: 980

.block

17270

.endblock

.block

copy: 1 id: 50054-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17294

AUTH: KLEMENS P.G.

CLSS: U

CONN: DA AROD 31 124 70 G98 ; DA AROD 31 124 71 G139

CORP: UNIVERSITY OF CONNECTICUT (STORRS, CT.)

DATE: 7310

DESC: EXPERIMENTAL SUMMARY

DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability

L5

DESC: Nuclear Weapon Effects materials ceramics optical L5 NON-DESTRUCTIVE

TESTS FOR DAMAGE

EFFT: TREE

SUJO: 3-241-000 ; 4-170-000

TITL: RADIATION DAMAGE IN SOLIDS AND PHONON SCATTERING (U), 16 P., (U)

TREE: 649

.block

17294

.endblock

.block

copy: 1 id: 50085-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17324

AUTH: BORG I.Y.

CLSS: SRD

CONN: W 7405 ENG 48

CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)

DATE: 7308

DESC: EXPERIMENTAL

DESC: Nuclear Energy Peaceful Applications radiation problems L5

DESC: Nuclear Weapon Environment Fallout isotope concentrations L1

REPN: UCRL 51443

SHOT: PILEDRIIVER

TSHO: UG-CONTAINED

SUJO: 2-223-100 ; 3-480-400
TEMP: A5154
TITL: LONG-LIVED RADIONUCLIDES CONTAINED IN GLASSES PRODUCED BY A NUCLEAR
EXPLOSION IN GRANODIORITE (PILEDRIIVER EVENT) (U), 36 P., (SRD)

.block
17324
.endblock

.block
copy: 1 id: 50106-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17327

ABS: The study of rainout has received additional impetus from recent investigations of the impact of collateral damage upon tactical nuclear operations. Additional research is going forward at Lawrence Livermore Laboratory to provide an improved technical basis for the assessment of rainout. The project is designed to develop improved understanding of the basic physical interactions that control the processes and to assess more rigorously the potential hazards to man. Aspects of the work described here include a microphysical description of precipitation scavenging of the nuclear debris aerosol, progress in the numerical modeling of natural cloud systems and their interactions with nuclear debris aerosols, and investigations of possible means of controlling the rainout-removal process. This is an interim report;

ABS: it is expected that continuing research over the next six months will permit a more precise basis for analysis of the phenomenon.
(auth) NUCLEAR EXPLOSIONS; RADIOACTIVE CLOUDS; RADIOACTIVE CLOUDS;
PRECIPITATION SCAVENGING; ATMOSPHERIC EXPLOSIONS; ATMOSPHERIC
PRECIPITATIONS; DISTRIBUTION; EARTH ATMOSPHERE; FALLOUT; HUMAN
POPULATIONS; PARTICLE SIZE; RADIATION DOSES; RADIATION HAZARDS;
RADIOACTIVE AEROSOLS; RESEARCH PROGRAMS; WASHOUT

AUTH: KNOX J.B. ; WILLIAMS A.L.
CLSS: U
CONN: W 7405 ENG 48
CORP: LAWRENCE LIVERMORE LABORATORY (LIVERMORE, CA.)
DATE: 7402
DESC: THEORY
DESC: Nuclear Weapon Environment fallout accumulation rate L1
DESC: Nuclear Weapon Environment fallout transfer L1
REPN: UCRL 51530
SUJO: 2-224-300 ; 2-225-400
TITL: RAINOUT STUDIES AT LAWRENCE LIVERMORE LABORATORY (U), 17 P., (U)

.block
17327
.endblock

.block
copy: 1 id: 50108-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17349
AUTH: STAIR A.T.
CLSS: U (DECLASSED)
DATE: 7303
DESC: test instruments EM propagation atmospheric chemistry L5
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments IR L5
DESC: ICE CAP ; EXPERIMENTAL TABULAR
DESC: Emission Spectra of the Atmosphere L1 OH NO AURORA
SUJO: 4-320-000 ; 4-383-000 ; 4-820-600 ; 5-600-000
TEMP: A5151
TITL: ICECAP 72, HIGH ALTITUDE OH ALTITUDE PROFILE, QUIET CONDITIONS (U),
21 P., (S)

.block

17349

.endblock

.block

copy: 1 id: 50123-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17352
AUTH: ARIMURA I.
CLSS: U
CONN: F 29601 71 C 0001
CORP: BOEING CO. (SEATTLE, WASH.)
DATE: 7401
DESC: TABULAR
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFWL TR 73 134 VOL. 2, PT. 1
SUJO: 3-221-000 ; 3-222-000
TITL: STUDY OF ELECTRONICS RADIATION HARDNESS ASSURANCE TECHNIQUES; VOL.
2, PT. 1, ELECTRICAL SCREENING FOR NEUTRON EFFECTS (U), 172 P., (U)
TREE: 610 ; 649

.block

17352

.endblock

.block

copy: 1 id: 50126-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17353
AUTH: ARIMURA I.
CLSS: U
CONN: F 29601 71 C 0001
CORP: BOEING CO. (SEATTLE, WASH.)
DATE: 7401

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: TABULAR
REPN: AFWL TR 73 134 VOL. 2, PT. 2
SUJO: 3-221-000 ; 3-222-000
TTTL: STUDY OF ELECTRONICS RADIATION HARDNESS ASSURANCE TECHNIQUES; VOL.
2, PT. 2, ELECTRICAL SCREENING FOR IONIZING RADIATION RATE AND TOTAL
DOSE EFFECTS (U), 144 P., (U)
TREE: 610 ; 649

.block

17353

.endblock

.block

copy: 1 id: 50127-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17354
AUTH: ARIMURA I.
CLSS: U
CONN: F 29601 71 C 0001
CORP: BOEING CO. (SEATTLE, WASH.)
DATE: 7401
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: EXPERIMENTAL
REPN: AFWL TR 73 134 VOL. 2, PT. 3
SUJO: 3-221-000 ; 3-222-000
TTTL: STUDY OF ELECTRONICS RADIATION HARDNESS ASSURANCE TECHNIQUES; VOL.
2, PT. 3, ELECTRICAL SCREENING FOR SECOND BREAKDOWN (U), 128 P., (U)
TREE: 610 ; 649

.block

17354

.endblock

.block

copy: 1 id: 50128-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17378
AUTH: STAMPER J.A.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7404
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
DESC: Plasma Physics MHD fusion L1
DESC: THEORY
REPN: NRL MR 2775
SUJO: 3-616-750 ; 9-500-000

TITLE: MACROSCOPIC DESCRIPTION OF RADIATION PRESSURE FORCES IN
LASER-PRODUCED PLASMAS (U), 16 P., (U)

.block

17378

.endblock

.block

copy: 1 id: 50132-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17380

ADNO: 916698L

AUTH: LONG J.F. ; EBEOGLU D.B. ; HARWELL K.E.

CLSS: U

CORP: AIR FORCE SYSTEMS COMMAND, AIR FORCE ARMAMENT LAB. (EGLIN AFB, FL.)

DATE: 7401

DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L1

DESC: EXPERIMENTAL TABULAR

DESC: test instruments IR L5

DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1

REPN: AFATL TR 74 15

SUJO: 4-383-000 ; 4-820-000 ; 4-820-600

TITLE: INFRARED PLUMES SIMULATION TEST FACILITY HANDBOOK (U), 42 P., (U)

.block

17380

.endblock

.block

copy: 1 id: 50134-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17395

AUTH: ALYEA F.N.

CLSS: U

CONN: F 30602 73 C 0102

CORP: GENERAL ELECTRIC CO., SPACE SCIENCES LAB.

DATE: 7310

DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1

DESC: EXPERIMENTAL TABULAR

REPN: RADC TR 73 365

SUJO: 4-820-600

TITLE: INFRARED VIDICON OBSERVATION OF EXPLODING BALLOON EVENTS (U), 35 P.,
(U)

.block

17395

.endblock

.block

copy: 1 id: 50147-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17397
CLSS: U
CORP: SPACE DATA CORP. (PHOENIX, AZ.) ; ARMY SPECIAL PROJECTS BRANCH
(WHITE SANDS MISSILE RANGE, N.M.) ; AIR FORCE CAMBRIDGE RESEARCH
LABS. (BEDFORD, MA.)
DATE: 7312
DESC: ICE CAP ; EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1 FIELD REQUIREMENTS AND
PROCEDURES ICE CAP 74A
REPN: SDC TM 718A
SUJO: 4-820-600
TITL: ICE CAP 74A FIELD REQUIREMENTS AND PROCEDURES (U), CA. 70 P., (U)

.block

17397

.endblock

.block

copy: 1 id: 50149-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17415
AUTH: KAUL D.C.
CLSS: U
CORP: DEFENSE NUCLEAR AGENCY, RADIATION PHYSICS DIV. (WASH., D.C.)
DATE: 7402
DESC: Shielding Protection L5
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1
SUJO: 4-140-000 ; 9-800-000
TITL: DEFENSE NUCLEAR AGENCY RADIATION TRANSPORT STATUS REPORT (U), 37 P.,
(U)

TREE: 950

.block

17415

.endblock

.block

copy: 1 id: 50171-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17455
ADNO: 528367L
AUTH: BREUCH R.A.
CLSS: SRD
CONN: F 04701 72 C 0334
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7308
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical

devices sensors IR detectors L5 MIRRORS

DESC: SIMULATION
EFFT: X-RAY
REPN: LMSC B324264 ; SAMSO TR 73 313
SUJO: 3-133-000
TEMP: A5174
TITL: RADIATION EFFECTS ON PASSIVE OPTICAL SENSOR COMPONENTS (U), 54 P.,
(SRD)
TREE: 361

.block
17455
.endblock

.block
copy: 1 id: 50270-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17494
CLSS: U
CONN: DNA 001 73 C 155
CORP: HOLMES AND NARVER, INC. (ANAHEIM, CA.)
DATE: 7404
DESC: Environmental Impact Assessments EIS Supporting Data L1
DESC: RADIATION SURVEY RESULTS (SUMMARY) ; SURVEY
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic L5
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic L5
EFFT: RADIOACTIVE SPECIES
REPN: HN 8156.1
SUJO: 3-312-200 ; 3-332-200 ; 4-870-130
TITL: CLEANUP, REHABILITATION, RESETTLEMENT OF ENEWETAK ATOLL--MARSHALL
ISLANDS, VOL. 1; DRAFT ENVIRONMENTAL IMPACT STATEMENT (U), CA. 300
. P., (U)

.block
17494
.endblock

.block
copy: 1 id: 50302-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 17495
CLSS: U
CONN: DNA 001 73 C 155
CORP: HOLMES AND NARVER, INC. (ANAHEIM, CA.)
DATE: 7404
DESC: Nuclear Weapon Environment Fallout isotope concentrations L5
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L5
DESC: Environmental Impact Assessments EIS Supporting Data L1
DESC: Nuclear Weapon Environment fallout intensity contours patterns L5
ENEWETAK
DESC: SUMMARY

REPN: HN 8156.2
SUJO: 2-223-100 ; 2-225-100 ; 3-312-220 ; 4-870-130
TITL: CLEANUP, REHABILITATION, RESETTLEMENT OF ENEWETAK ATOLL--MARSHALL
ISLANDS, VOL. 2; DRAFT ENVIRONMENTAL IMPACT STATEMENT (U), CA. 250
P., (U)

.block

17495

.endblock

.block

copy: 1 id: 50303-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17540
AUTH: WHITNEY K. ; DAVIS J.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7404
DESC: Plasma Physics MHD fusion L1
DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L1
DESC: THEORY EXPERIMENTAL TABULAR
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
REPN: NRL MR 2780
SUJO: 3-616-750 ; 4-820-000 ; 9-500-000
TITL: HOT-SPOT MODEL OF K-LINE EMISSION FROM LASER-HEATED PLASMAS (U), 46
P., (U)

.block

17540

.endblock

.block

copy: 1 id: 50340-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17559
AUTH: POWELL R.J.
CLSS: U
CONN: N 00014 73 C 0277
CORP: RCA LABS. (PRINCETON, N.J.)
DATE: 7401
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
PYRO AL203 AS MIS GATE
EFFT: TREE
REPN: PRRL 74 CR 5
SUJO: 3-222-000
TITL: RADIATION AND CHARGE TRANSPORT PHENOMENA IN IMPROVED HARDENED
INSULATORS (U), 42 P., (U)
TREE: 320 ; 200

.block

17559

.endblock

.block

copy: 1 id: 50351-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17577
AUTH: JACOBSON J.R.
CLSS: U
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7403
DESC: test instruments nuclear radiation gamma L1 TLD
DESC: EXPERIMENTAL
REPN: BRL R 1703
SUJO: 4-341-000
TITL: NEUTRON RESPONSE MEASUREMENTS FOR VARIOUS PASSIVE GAMMA DOSIMETERS
(U), 31 P., (U)
TREE: 651 ; 364

.block

17577

.endblock

.block

copy: 1 id: 50365-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 17981
ABS: The DNA thermal sourcebook is a comprehensive summary of theoretical results and experimental data on the prompt thermal radiation environment produced by atmospheric nuclear bursts. This chapter of volume 1 of the sourcebook presents the text of the discussion on atmospheric transmission. This chapter summarizes the basic theory of radiative transfer in an absorbing and scattering atmosphere and describes the pertinent atmospheric optical and infrared properties. A summary of some important atmospheric scattering experiments is also given. The last part of the chapter is devoted to a presentation and discussion of the most significant of the nuclear weapon prediction methods developed in the last twenty years.

AUTH: KEITH J.R.
CLSS: U
CCDE: TAX (VISIBLE TRANSPORT) ; TRAX (VISIBLE TRANSPORT)
CONN: DASA 01 69 C 0082
CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO.)
DATE: 7309
DESC: THEORY EXPERIMENTAL TABULAR HANDBOOK
DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
DESC: Radiation Transport visible L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: Nuclear Weapon Environment Visible Output L1
REPN: K 73 534 (R)
SUJO: 1-400-000 ; 5-200-000 ; 5-400-000 ; 9-630-000
TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 1, ANALYSIS;

CHAPTER 2, ATMOSPHERIC TRANSMISSION (U), CA. 500 P., (U)

.block

17981

.endblock

.block

copy: 1 id: 50742-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18282

AUTH: KNOX J.B.

CLSS: CFRD

CONN: W 7405 ENG 48

CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)

DATE: 7405

DESC: Nuclear Weapon Environment fallout accumulation rate L1

DESC: Nuclear Weapon Environment fallout transfer L1

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L5

DESC: Nuclear Weapon Environment fallout down fraction L1

DESC: (REVISED NO.) ; THEORY

REPN: UCRL 51535 (REV. 1)

TSHO: LOW-ALT

SUJO: 2-224-300 ; 2-225-200 ; 2-225-400 ; 3-312-100

TEMP: A6116

TITL: RAINOUT IN PERSPECTIVE (U), 20 P., (CFRD)

.block

18282

.endblock

.block

copy: 1 id: 51038-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18289

AUTH: BERGER R.A. ; COLWELL J.F. ; FISCHER C.J. ; FLANAGAN T.M. ; GREEN
B.A. ; KALMA A.H. ; LEADON R.E.

CLSS: U

CCDE: RECOIL (TREE EFFECTS) IRT

CONN: DAAG 39 73 C 0197

CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)

DATE: 7311

DESC: SIMULATION (LINAC) ; THEORY EXPERIMENTAL

DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 OPTICAL WINDOWS GAAS ZNS ZNSE CDTE
IRTRAN

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 STUDY OF RESPONSE OF MOS STRUCTURES

EFFT: NETURON ; TREE

REPN: HDL TR 197 1 ; 8008 003

SUJO: 3-133-000 ; 3-221-000

TITL: TRANSIENT RADIATION EFFECTS (U), 86 P., (U)

TREE: 325 ; 361

.block

18289

.endblock

.block

copy: 1 id: 51041-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18338

ABS: The objectives of this project were to review the NAVAIR nuclear survivability program and to provide specific recommendations that should be implemented for a viable approach to meeting NAVAIR's survivability responsibilities. The report provides a review of NAVAIR's technical activities to determine areas where Nuclear EMP vulnerability assumes special significance. Specific topics addressed include a technical discussion of the nuclear threat, potential environments resulting from these threats, and the nuclear effects and systems response that are considered to be of special significance.

ABS: The scenarios identified by the Navy as pertinent to the nuclear survivability of aircraft systems are: : carrier attack : base attack : SAM engagements : air-to-air engagements : appendices to this report contain technical information which could be utilized in the implementation of recommendations made in the report. These are:
-Appendix A recommended NAVAIR EMP program considerations : Appendix B -EMP design guidelines for hardening avionic systems : Appendix C -radiation design guidelines for hardening of avionics electronics : Appendix D -draft survivability Program Plan for advanced naval aircraft systems.

AUTH: SCOTT L. ; MCGRATH E.J. ; WOODALL D. ; CAMPBELL J. ; GILLIAM W.T. ; RETTBURG R.J. ; SWICK E.

CLSS: SRD

CONN: N 00178 73 C 0223

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)

DATE: 7308

DESC: Nuclear Weapon Effects flight systems airplanes electronics L1

DESC: THEORY TABULAR

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes silicon-controlled rectifiers L1

EFFT: EMP ; TREE

EMPF: 375

REPN: SAI 73 578 LJ

SUJO: 3-111-300 ; 3-221-000

TEMP: A6018

TITL: RECOMMENDATIONS FOR NUCLEAR SURVIVABILITY OF NAVY AIRCRAFT (U), 193 P., (SRD)

TNFF: 5820

TREE: 398 ; 310

.block

18338

.endblock

.block

copy: 1 id: 51093-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18339
ADNO: 529258
AUTH: PARKINSON E.R. ; ARON W.A. ; JOHNSON B.
CLSS: U (DECLASSIFIED)
CCDE: ARIADNE (EMP ENVIRONMENT) SAI ; SAPSC (IEMP) SAI
CONN: DAAG 39 73 C 0013
CORP: SCIENCE APPLICATIONS INC. (LA JOLLA, CA.)
DATE: 7305
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
DESC: Nuclear Weapon Environment Induced Electromagnetic Pulse EMP L1
DESC: THEORY TABULAR CODE
EFFT: IEMP
EMPF: 391 ; 221
REPN: SAI 73 214 LJ
TSHO: HI-ALT
SUJO: 2-510-000 ; 3-259-400
TEMP: A6019
TITL: LATE-TIME EMP FROM EXOATMOSPHERIC BURSTS AND A FEASIBILITY STUDY OF
EMP COUPLING EXPERIMENTS IN RADIATION ENVIRONMENTS (U), 152 P., (S)

.block

18339

.endblock

.block

copy: 1 id: 51094-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18379-026
AUTH: PENDLEBURY E.D.
CLSS: SRD
CORP: ATOMIC WEAPONS RESEARCH ESTABLISHMENT
DATE: 7300
DESC: Cross Sections neutron L1
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1
DESC: TABULAR
LA: UK
SUJO: 4-140-000 ; 9-820-000
SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973
TITL: CROSS SECTION LIBRARIES AND NEUTRONICS MODELS USED IN WEAPON
CALCULATIONS (U), 3 P., (SRD)

TREE: 412

.block

18379-026

.endblock

.block

copy: 1 id: 51139-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18379-031
AUTH: WEBSTER W.M.
CLSS: SRD
CCDE: MCNEUT (NETURON TRANSPORT AND WEAPON OUTPUT) LLL
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7300
DESC: Nuclear weapon test burn performance L1
DESC: Radiation Transport neutron L1
DESC: EXPERIMENTAL TABULAR
SUJO: 4-837-000 ; 9-650-000
SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973
TITL: B-DIVISION CROSS SECTION LIBRARY (U), 5 P., (SRD)
TREE: 970 ; 412

.block

18379-031

.endblock

.block

copy: 1 id: 51141-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18379-036
AUTH: HIRONS T.J.
CLSS: SRD
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)
DATE: 7300
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L5
DESC: SUMMARY
SUJO: 4-140-000
SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973
TITL: CROSS SECTION LIBRARIES AND NEUTRONICS MODELS USED IN WEAPONS
CALCULATIONS (U), 2 P., (SRD)
TREE: 412

.block

18379-036

.endblock

.block

copy: 1 id: 51142-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18379-059
AUTH: HANSEN L.
CLSS: SRD
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)

DATE: 7300
DESC: TABULAR
DESC: Radiation Transport neutron L1
SUJO: 9-650-000
SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973
TITL: FE PULSED SPHERES IRRADIATED BY 14-MEV NEUTRONS (U), 3 P., (SRD)
TREE: 970

.block

18379-059

.endblock

.block

copy: 1 id: 51151-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18379-096
AUTH: PENDLEBURY E.D.
CLSS: SRD
CORP: ATOMIC WEAPONS RESEARCH ESTABLISHMENT
DATE: 7300
DESC: SUMMARY
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L5

LA: UK

SUJO: 4-140-000

SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973

TITL: STATUS OF THE AWRE CROSS SECTION LIBRARY AND EVALUATION PROGRAM (U),
3 P., (SRD)

TREE: 412

.block

18379-096

.endblock

.block

copy: 1 id: 51156-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18379-099
AUTH: CULLEN D.E. ; MACGREGOR M.H.
CLSS: SRD
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7300
DESC: SUMMARY
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L5

SUJO: 4-140-000

SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973

TITL: STATUS OF THE LLL CROSS SECTION LIBRARY AND EVALUATION PROGRAM,
INCLUDING DNA FUNDED WORK (U), 2 P., (SRD)

TREE: 412

.block

18379-099

.endblock

.block

copy: 1 id: 51157-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18379-104

AUTH: STEWART L.

CLSS: SRD

CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)

DATE: 7300

DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L5

DESC: SUMMARY

SUJO: 4-140-000

SYMJ: PROCEEDINGS OF AWRE-LLL-LASL CROSS-SECTION MEETING HELD AT LOS
ALAMOS, NEW MEXICO, MARCH 20-21, 1973

TITL: SUMMARY AND STATUS OF THE LIGHT ELEMENT CROSS SECTION EVALUATIONS
(U), 3 P., (SRD)

TREE: 412

.block

18379-104

.endblock

.block

copy: 1 id: 51159-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 18516

AUTH: KAUFMANN R.L.

CLSS: U

CONN: NAS W 155

CORP: UNIVERSITY OF NEW HAMPSHIRE, DEPT. OF PHYSICS. (DURHAM, N.H.)

DATE: 7400

DESC: THEORY EXPERIMENTAL

DESC: Nuclear Weapon Environment Induced Synchrotron Noise L1

DESC: Nuclear Weapon Phenomenology High-Altitude injection trapping L1

REPN: UNH 332

SHOT: STARFISH

TSHO: HI-ALT

SUJO: 2-217-000 ; 2-420-000

TITL: SYNCHROTRON RADIATION FROM THE STARFISH ELECTRON BELT (U), CA. 50
P., (U)

.block

18516

.endblock

.block

copy: 1 id: 51301-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18558
AUTH: WALTNER A.W. ; OLIVER G.J.
CLSS: U
CONN: DAAD 05 69 C 0294
CORP: NORTH CAROLINA STATE UNIVERSITY AT RALEIGH (RALEIGH, N.C.)
DATE: 7405
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: EXPERIMENTAL
DESC: test instruments nuclear radiation proton alpha heavy particle L1
DESC: test instruments EM propagation atmospheric chemistry plasma
ionospheric diagnostics L1
DESC: test instruments EM propagation atmospheric chemistry direct probes
L1
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
REPN: BRL CR 151
SUJO: 4-120-000 ; 4-325-000 ; 4-327-000 ; 4-343-000 ; 5-738-000
TITL: PARTICLE FLUXES ASSOCIATED WITH SOLAR FLARES (U), 190 P., (U)

.block
18558
.endblock
.block

copy: 1 id: 51337-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18568
AUTH: CAMPBELL J.E. ; SANDMEIER H.A.
CLSS: U
CCDE: TWOTRAN-FC
CORP: NAVAL WEAPONS EVALUATION FACILITY (KIRTLAND AFB, N.M.)
DATE: 7304
DESC: Radiation Transport neutron L1
DESC: Radiation Transport gamma L1
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: EXPERIMENTAL TABULAR
EFFT: NEUTRON ; GAMMA
REPN: NWEF R 1102
SUJO: 3-312-100 ; 9-620-000 ; 9-650-000
TITL: RADIATION TRANSPORT IN AIR OVER GROUND AND AIR OVER SEAWATER FOR
APPLICATION TO LOW-ALTITUDE, LOW-YIELD TACTICAL NUCLEAR DETONATIONS
(U), 156 P., (U)

TREE: 960 ; 970

.block
18568
.endblock
.block

copy: 1 id: 51344-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18585
AUTH: PEEK H.M.
CLSS: SRD CNWDI
CCDE: RADFLO (THERMAL ; RADIATION HYDRO) LASL
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)
DATE: 7305
DESC: Nuclear Weapon Environment Visible Output rate L1
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Environment Visible Output angular distribution L1
REPN: LA 5263 PR
SHOT: FRENCH (72-06-30) ; ENCINO ; YESO
TSHO: LOW-ALT
SUJO: 1-430-000 ; 1-440-000 ; 2-110-000
TEMP: A5648
TITL: RESEARCH ON NUCLEAR WEAPONS PHENOMENOLOGY (U), 26 P., (SRD CNWDI)

.block

18585

.endblock

.block

copy: 1 id: 51360-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 18596
AUTH: CATES M.R.
CLSS: SRD CNWDI
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)
DATE: 7307
DESC: Nuclear Weapon Environment Prompt Neutron angular distribution L1
SOURCE ANGLE DISTRIBUTION
DESC: test instruments nuclear radiation neutron L1
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L1
DESC: Nuclear weapon test device physical operation construction geometry
materials components L1
DESC: EXPERIMENTAL
REPN: LA 5256
SHOT: APODACA ; ATARQUE
TSHO: UG-CONTAINED
SOCE: [REDACTED]
SUJO: 1-120-000 ; 1-130-000 ; 4-342-000 ; 4-836-000
TEMP: A5687
TITL: TIME-INTEGRATED NEUTRON PINEXES FOR THE APODACA AND ATARQUE EVENTS
(U), 34 P.,(SRD CNWDI)

TREE: 920

.block

18596

.endblock

.block

copy: 1 id: 51371-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19137
AUTH: BERMAN M.
CLSS: SRD CNWDI
CCDE: CHARTD (RADIATION HYDRO ; ID) SCA
CORP: SANDIA LABORATORIES (ALBUQUERQUE, N.M.)
DATE: 7302
DESC: Nuclear Test Simulation Field Programs experiment design stemming
containment line of sight LOS L1 LOS PIPE CLOSURE
DESC: Nuclear Weapon Phenomenology UGT Debris in tunnels L1
DESC: TABULAR
REPN: SC WD 72 0725 ; RS 3150/2423
TSHO: UG-CONTAINED
SUJO: 2-230-000 ; 4-829-700
TEMP: A6259
TITL: SHOCK FORMATIONS BETWEEN CONCENTRIC INFINITE CYLINDERS (U), 104 P.,
(SRD CNWDI)

.block

19137

.endblock

.block

copy: 1 id: 51911-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19215
AUTH: MUIR D.W. ; CARTER L.L.
CLSS: SRD CNWDI
CCDE: CASPAR (RADIATION FLUX-GAMMA AND NEUTRON) LASL
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM.)
DATE: 7302
DESC: test instruments nuclear radiation L1 RADIATION DETECTION
DESC: CODE
REPN: LA 5192 M
SUJO: 4-340-000
TEMP: A6993
TITL: USER'S MANUAL FOR CASPAR (U) 60 P., (SRD CNWDI)

.block

19215

.endblock

.block

copy: 1 id: 51997-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19221
 AUTH: GLASGOW D.W. ; VELKLEY D.E. ; BRANDENBERGER J.D. ; MCELLISTREM M.T.
 CLSS: U
 CONN: F 33615 71 C 1504
 CORP: ADENA CORP. (LEXINGTON, KY.)
 DATE: 7309
 DESC: Nuclear Weapon Effects electronic pieceparts materials basic
 mechanisms L1 SI
 DESC: Nuclear Weapon Effects materials metals alloys L1 AL FE NI CO
 DESC: Simulation Facilities Techniques TREE L1 TANDEM ACCELERATOR
 DESC: Nuclear Weapon Effects materials carbon L1
 DESC: EXPERIMENTAL
 DESC: Simulation Facilities Techniques nuclear radiation shielding
 facilities L1
 DESC: Cross Sections neutron L1 SCATTERING CROSS SECTIONS FOR AL SI FE NI
 CO AT 9 MEV + C FROM 7-9 MEV
 EFFT: NEUTRON
 SUJO: 3-220-200 ; 3-243-000 ; 3-248-000 ; 4-243-000 ; 4-272-000 ;
 9-820-000
 TITL: FAST NETURON CROSS SECTIONS MEASUREMENT SYSTEM AND RESULTS (U), 187
 P., (U)
 TREE: 652 ; 412
 .block
 19221
 .endblock
 .block
 copy: 1 id: 52003-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent
 .endblock

INUM: 19260
 ABS: This report summarizes, at approximately the halfway point of the
 effort, the results in determining nuclear vulnerability and
 hardening levels for the a-6 and P-3 aircraft. Investigations
 include the following categories: nuclear threat, free-field
 environments, TREE, EMP, blast and thermal (structure), thermal and
 nuclear radiation (crew related), and mission completion estimates.
 Detailed system testing was accomplished in all these areas on the
 two aircraft. Additional data includes analysis of pilot performance
 during an A-7B aircraft mission and summaries of b-1, A-7E, F-106A,
 FB-111A, and a-6 vulnerability analyses. Much data is presented and
 measures of effectiveness and modeling techniques are explained. In
 addition, a detailed mission profile analysis is illustrated as an
 appendix. In-flight survivability is considered.

ADNO: 529615L
 AUTH: CAUDLE K.F. ; ROBERSON G.G. ; TASLITT N. ; CONNOR J.G. ; CHISUM G.T.
 ; STOLL A.M. ; MEREDITH O.M. ; REED K.W.
 CLSS: SRD
 CORP: NAVAL ORDNANCE LAB. (WHITE OAK, MD.)
 DATE: 7402
 DESC: EXPERIMENTAL TABULAR THEORY
 DESC: Nuclear Warfare Theater tactical air defense offense L1
 DESC: Nuclear Warfare Theater tactical navy ASW L1

DESC: Nuclear Weapon Effects flight systems airplanes L1
DESC: Target Analysis system studies aircraft L1
EFFT: EMP ; TREE ; THERMAL ; AIR-BLAST ; NEUTRON ; GAMMA
EMPF: 375
REPN: NOLTR 73 180
SUJO: 3-111-000 ; 3-412-300 ; 3-412-400 ; 3-431-100
SYST: P-3 AIRCRAFT ; A-6 AIRCRAFT
TEMP: A7504
TITL: NUCLEAR WARFARE SURVIVABILITY OF AIRCRAFT PROJECT W48-16X, INTERIM
SUMMARY REPORT, JULY 1970 -SEPTEMBER 1973 (U), 200 P., (SRD)
TNFF: 5820 ; 5500
TREE: 398

.block

19260

.endblock

.block

copy: 1 id: 52044-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19323
AUTH: FOWKES F.M. ; DAHLKE W.E. ; BUTLER S.R.
CLSS: U
CONN: DAAG 9 73 C 0200
CORP: LEHIGH UNIVERSITY (BETHLEHEM, PA.)
DATE: 7401
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SIMULATION (CO 60) ; THEORY EXPERIMENTAL
EFFT: TREE
REPN: HDL TR 200 1
SUJO: 3-221-000
TITL: RADIATION EFFECTS IN MOS GATE INSULATORS (U), 44 P., (U)
TREE: 325

.block

19323

.endblock

.block

copy: 1 id: 52088-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19324
AUTH: COMISAR G.G.
CLSS: U
CCDE: BB DIODE (IEMP) AEROSPACE CORP.
CONN: F 04701 73 C 0074
CORP: AEROSPACE CORP. (EL SEGUNDO, CA.)
DATE: 7405
DESC: Nuclear Weapon Effects structures aboveground models plates slabs L1
DESC: THEORY CODE
EFFT: IEMP

EMPF: 391
REPN: SAMSO TR 74 118 ; TR 0074 (4124) 3
SUJO: 3-259-300
TTTL: SPACE CHARGE LIMITING FROM BLACKBODY RADIATION (U), 38 P., (U)

.block

19324

.endblock

.block

copy: 1 id: 52089-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19393
ADNO: 530228
AUTH: SMITH D.R. ; MEREDITH O.M.
CLSS: C
CORP: NAVAL ORDNANCE LAB. (WHITE OAK, MD.)
DATE: 7402
DESC: CALCULATED DECREASE IN ANTIMISSILE PERFORMANCE ; THEORY
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: Nuclear Weapon Effects ship systems surface ships L1
EFFT: INTEGRATED
REPN: NOLTR 73 230
SUJO: 3-122-000 ; 3-312-100
TEMP: A7403
TTTL: MISSION EFFECTIVENESS OF DLGN-38 IN A NUCLEAR WARFARE ENVIRONMENT
(U), 23 P., (C)

.block

19393

.endblock

.block

copy: 1 id: 52161-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 19394
ADNO: 530251L
AUTH: MEREDITH O.M. ; SMITH D.R.
CLSS: C
CCDE: SRTS
CORP: NAVAL ORDNANCE LAB. (WHITE OAK, MD.)
DATE: 7311
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: DEGRADATION OF CIC RESPONSE TIME ; THEORY
DESC: Nuclear Weapon Effects ship systems surface ships L1
EFFT: NEUTRON ; GAMMA
REPN: NOLTR 73 194
SUJO: 3-122-000 ; 3-312-100
TEMP: A7402
TTTL: IMPACT OF NUCLEAR WEAPONS EFFECTS UPON COMBAT INFORMATION CENTER
(CIC) PERSONNEL OF THE DLGN-38 CLASS SHIPS (U), 28 P., (C)

.block

19394
.endblock
.block
copy: 1 id: 52162-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 19901
AUTH: BURT D.A. ; DAVIS C.S.
CLSS: U
CONN: F 19628 72 C 0255
CORP: UTAH STATE UNIVERSITY (LOGAN, UT.)
DATE: 7402
DESC: HAES SIMULATION ICECAP ; EXPERIMENTAL
DESC: test instruments EM propagation atmospheric chemistry plasma
ionospheric diagnostics L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments IR L1
REPN: AFCRL TR 74 0195 ; HAES 3
SUJO: 4-325-000 ; 4-383-000 ; 4-820-600
TITL: ROCKET INSTRUMENTATION FOR ICECAP 73A AURORAL MEASUREMENTS
PROGRAM--BLACK BRANT 18.205-1 (U), 147 P., (U)

.block
19901
.endblock
.block

copy: 1 id: 52708-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 19903
ADNO: 530597L
AUTH: GARING J.S. ; WALKER R.G. ; PRICE S.D. ; STAIR A.T.JR. ; MCCLATCHEY
R.A. ; TURNER V. ; SCHURIN B.D.
CLSS: S
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA.)
DATE: 7404
DESC: test instruments IR L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Emission Spectra of the Atmosphere L1
DESC: EXPERIMENTAL
REPN: AFCRL TR 74 0191 ; AFSG 285
SUJO: 4-383-000 ; 4-820-600 ; 5-600-000
TEMP: A7624
TITL: LONG WAVELENGTH INFRARED BACKGROUNDS-MEASUREMENT PROGRAM II (U), 62
P., (S)

.block
19903
.endblock
.block

copy: 1 id: 52709-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 19916-433
AUTH: HEFFAN H.
CLSS: U
CORP: NAVAL WEAPONS STATION (CONCORD, CA.)
DATE: 7309
DESC: SUMMARY
SYMJ: MINUTES OF THE EXPLOSIVES SAFETY SEMINAR (15TH) HELD AT THE HYATT
REGENCY HOTEL, SAN FRANCISCO, CALIFORNIA, ON 18-20 SEPTEMBER 1973,
VOL. 1
TITL: TEST AND EVALUATION OF EXPLOSIVE ITEMS WITH IONIZING RADIATION AND
OTHER NONDESTRUCTIVE TEST METHODS (U), 52 P., (U)

.block
19916-433

.endblock

.block

copy: 1 id: 52722-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20032
CLSS: U
CONN: DNA 001 73 C 155
CORP: HOLMES + NARVER, INC. (ANAHEIM, CA.)
DATE: 7409
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic L1
DESC: Environmental Impact Assessments EIS Supporting Data L1
DESC: APPENDICES RADIOLOGICAL SURVEY AND ANALYSIS
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic uptake
L1
SUJO: 3-312-200 ; 3-332-220 ; 4-870-130
TITL: CLEAN UP, REHABILITATION, RESETTLEMENT OF ENEWETAK ATOLL -MARSHALL
ISLANDS; VOL. 2, CA. 400 P., (U)

.block

20032

.endblock

.block

copy: 1 id: 53081-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20046
AUTH: MCNEILLY J.H. ; RODGERS M.P.
CLSS: U
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7408
DESC: EXPERIMENTAL
DESC: test instruments nuclear radiation gamma L1

REPN: BRL R 1734
SUJO: 4-341-000
TTTL: RESPONSE OF SELECTED GAMMA-RAY DOSIMETERS TO HIGH ENERGY (2.25-9
MEV) PHOTONS (U), 67 P., (U)
TREE: 651 ; 364

.block
20046
.endblock
.block

copy: 1 id: 53089-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20049
AUTH: POCOCK D.N. ; KREBS M.G.
CLSS: U
CCDE: SCEPTRE
CONN: F 29601 72 C 0087
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA.)
DATE: 7406
DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L1
AMPLIFIERS

DESC: SIMULATION (LINAC FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 DIODES

EFFT: TREE
REPN: AFWL TR 73 110
SUJO: 3-213-000 ; 3-221-000
TTTL: RADIATION HARDENING OF LINEAR MICROCIRCUITS BY TERMINAL
PHOTOCOMPENSATION (U), 122 P., (U)
TREE: 320 ; 430

.block
20049
.endblock
.block

copy: 1 id: 53092-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20080
AUTH: WICKLEIN H.W. ; NUTLEY H. ; FERRY J.M.
CLSS: U
CONN: AF 29 (601) 5238
CORP: BOEING CO. (SEATTLE, WASH.)
DATE: 7306
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 CAPACITORS MYLAR VITAMIN
Q FIXED PAPERS CERAMIC TANTALUM MICA
DESC: SIMULATION (FLASH X-RAY LINAC REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L5 DIODES TRANSISTORS (2 TABLES
BELONGING TO SOME OTHER REPORT)

EFFT: TREE
SUJO: 3-221-000 ; 3-229-000
TITL: TRANSIENT CONDUCTIVITY IN CAPACITOR DIELECTRICS FOR GAMMA RADIATION
PULSES (U), 37 P., (U)

TREE: 370

.block

20080

.endblock

.block

copy: 1 id: 53121-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20083

AUTH: HUNT O.J.

CLSS: U

CORP: SAMSO

DATE: 7307

DESC: Environmental Impact Assessments EIS Supporting Data L1

SUJO: 4-870-110

TITL: ENVIRONMENTAL ASSESSMENT FOR FLIGHT TEST OF RADIATION ABLATION
TRANSDUCER (RAT) SENSOR ON MINUTEMAN III PVM-3 (U), 20 P., (U)

.block

20083

.endblock

.block

copy: 1 id: 53124-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20149

AUTH: RHOADES W.A. ; EMMETT M.B. ; MORRISON G.W. ; PACE J.V. ; PETRIE L.M.

CLSS: U

CCDE: VCS (ARMORED VEHICLE SHIELDING) ORNL

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7408

DESC: CODE

DESC: Nuclear Weapon Effects land transport armored vehicles L1 RADIATION
HAZARD WITHIN

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L5
METHOD OF CALCULATING ENVIRONMENT

EFFT: NEUTRON ; GAMMA

REPN: ORNL TM 4648

SUJO: 3-151-000 ; 3-312-100

TITL: VEHICLE CODE SYSTEM (VCS) USER'S MANUAL (U), 73 P., (U)

.block

20149

.endblock

.block

copy: 1 id: 53186-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20152
ADNO: 529391L
AUTH: LEE J.C.
CLSS: SRD
CONN: F 04701 72 C 0051
CORP: LOCKHEED MISSILES AND SPACE CO., INC. (PALO ALTO, CA.)
DATE: 7310
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L5 DOSE FOR SPECIFIC
SATELLITE MISSION
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L5 GENERALIZED INFORMATION ONLY
DESC: Nuclear Weapon Effects space systems spacecraft or satellites
electronics L5 PRIMARILY ENVIRONMENT
EFFT: X-RAY ; BETA ; EMP ; IEMP ; TREE
REPN: SAMSO TR 74 34 ; LMSC B305004 1
SUJO: 3-114-300 ; 3-133-000 ; 5-800-000
TEMP: A7646
TITL: NUCLEAR ENVIRONMENTS DEFINITION (U), 127 P., (SRD)

.block

20152

.endblock

.block

copy: 1 id: 53189-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20194
AUTH: LOGOTHETTI R.J. ; RAINEY C.T.
CLSS: U
CONN: DAHC 20 72 C 0257
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA.)
DATE: 7303
DESC: SUMMARY
REPN: SRI EGU 1692
TITL: ALTERNATIVE RADIOLOGICAL SYSTEMS (U), 139 P., (U)

.block

20194

.endblock

.block

copy: 1 id: 53217-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20276
CLSS: U
CONN: AT (26 1) 294
CORP: EBERLINE INSTRUMENT CORP. (SANTA FE, N.M.)
DATE: 7308
DESC: SUMMARY

DESC: Nuclear Weapon Test safety L1
DESC: Nuclear Weapon Test support facilities L1 RADIOLOGICAL AND MEDICAL
SUPPORT
REPN: NVO 294 6
SHOT: CANNIKIN
TSHO: UG-CONTAINED
SUJO: 4-855-100 ; 4-856-000
TITL: PROJECT CANNIKIN; ON-SITE RADIOLOGICAL SAFETY AND MEDICAL SERVICES,
FINAL REPORT (U), 37 P., (U)

.block

20276

.endblock

.block

copy: 1 id: 53274-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20302
CLSS: U
CONN: AT (26 1) 410
CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO., INC. (LAS VEGAS, NV.)
DATE: 7305
DESC: Nuclear Weapon Test safety L1
DESC: EXPERIMENTAL
REPN: NVO 410 17
SHOT: DIAMOND MINE ; MINIATA ; ALGODONES ; PEDERNAL ; CATHAY ; DIAGONAL
LINE ; CHAENACTIS ; LONGCHAMPS ; ZINNIA ; MONERO
TSHO: UG-CONTAINED
SUJO: 4-856-000
TITL: OPERATION GROMMET; ONSITE RADIOLOGICAL SAFETY REPORT JULY, 1971
THROUGH JUNE, 1972 (U), 22 P., (U)

.block

20302

.endblock

.block

copy: 1 id: 53296-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20451
AUTH: CHAPUT R.L. ; BERARDO P.A. ; BARRON E.L.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)
DATE: 7305
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
EFFT: BETA
REPN: AFRRRI SR 73 7
SUJO: 3-312-100
TITL: INCREASED BRAIN RADIORESISTANCE AFTER SUPRALETHAL IRRADIATION (U),
23 P., (U)

.block

20451
.endblock
.block
copy: 1 id: 53428-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20454
AUTH: RENE A.A. ; PARKER J.L. ; DARDEN J.H. ; EATON N.A.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)
DATE: 7302
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
EFFT: NEUTRON ; GAMMA
REPN: AFRRI SR 73 2
SUJO: 3-312-100
TITL: EFFECT OF A SUPRALETHAL DOSE OF RADIATION ON THE BLOOD-BRAIN BARRIER
(U), 21 P., (U)

.block
20454
.endblock

.block
copy: 1 id: 53431-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20455
AUTH: CURRAN C.R. ; YOUNG R.W. ; DAVIS W.F.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)
DATE: 7301
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: EXPERIMENTAL
EFFT: NEUTRON ; GAMMA
REPN: AFRRI SR 73 1
SUJO: 3-312-100
TITL: PERFORMANCE OF PRIMATES FOLLOWING EXPOSURE TO PULSED WHOLE-BODY
GAMMA-NEUTRON RADIATION (U), 28 P., (U)

.block
20455
.endblock

.block
copy: 1 id: 53432-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20457
AUTH: DOYLE T.F. ; CURRAN C.R. ; TURNS J.E.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)

DATE: 7306
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: EXPERIMENTAL
EFFT: NEUTRON ; GAMMA
REPN: AFRRI SR 73 9
SUJO: 3-312-100
TITL: CHLORPHENIRAMINE AS A PROPHYLAXIS TO RADIATION-INDUCED PERFORMANCE
DECREMENT IN THE MONKEY (U), 15 P., (U)

.block

20457

.endblock

.block

copy: 1 id: 53434-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20458
AUTH: ZEMAN G.H. ; JONES S.R. ; GEORGE R.E. ; LEVIN S.G.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)
DATE: 7302
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: EXPERIMENTAL
EFFT: NEUTRON ; GAMMA
REPN: AFRRI SR 73 3
SUJO: 3-312-100
TITL: RELATIVE EFFECTIVENESS OF FISSION NEUTRONS FOR GASTROINTESTINAL
DAMAGE IN MICE--JEJUNAL CRYPT STEM CELL SURVIVAL (U), 12 P., (U)

.block

20458

.endblock

.block

copy: 1 id: 53435-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20460
AUTH: NUTTER J.E. ; GRAW R.G. ; BAUM S.J.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD.)
DATE: 7303
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
EFFT: GAMMA
REPN: AFRRI SR 73 5
SUJO: 3-312-100
TITL: THERAPY OF POSTIRRADIATION MARROW HYPOPLASIA WITH BLOOD COMPONENTS
AND ANTIBIOTICS (U), 15 P., (U)

.block

20460

.endblock

.block

copy: 1 id: 53437-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20487
ADNO: 530933L
AUTH: OKEEFE J.D.
CLSS: S
CONN: F 33615 72 C 1578
CORP: TRW SYSTEMS GROUP (REDONDO BEACH, CA.)
DATE: 7405
DESC: Directed Energy Weapons Lasers Effects space systems satellites
spacecraft L1
DESC: Description No Vulnerability Non-weapon Lasers L9
DESC: EXPERIMENTAL
EFFT: LASER
REPN: AFAPL TR 74 40
SUJO: 3-613-250 ; 3-920-000
TEMP: A7670
TITL: LASER RADIATION EFFECTS ON SPACECRAFT SOLAR ENERGY CONVERTERS (U),
296 P., (S)
TREE: 362

.block
20487
.endblock

.block
copy: 1 id: 53460-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20493
AUTH: HUMBERT-DROZ C. ; COLLIN M. ; FREY A.
CLSS: U
CORP: CENTRE DE?ETUDES DE BRUYERES-LE-CHATEL
DATE: 7312
DESC: Nuclear Weapon Environment Ground Shock cavities subsidence collapse
L1

DESC: TEXT IN FRENCH
DESC: Nuclear Energy Peaceful Applications radiation problems L1
LA: FRANCE, NOT TRANSLATED
REPN: CEAR R 4519
TSHO: UG-CONTAINED
SUJO: 2-627-000 ; 3-480-400
TITL: EVOLUTION PHYSICO-CHIMIQUE DE LA CAVITE CREEE PAR UNE EXPLOSION
NUCLEAIRE SOUTERRAINE (U), 24 P., (U)

.block
20493
.endblock
.block

copy: 1 id: 53463-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20501
AUTH: READY J.M.
CLSS: C
CORP: NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER (BETHESDA, MD.)
DATE: 7408
DESC: Nuclear Weapon Effects materials coatings laminates L1 THERMAL
PROTECTION COATINGS
DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio
microwave systems antennas L1 SURVEY OF POSSIBLE SHIP RADOME
MATERIALS FOR THERMAL PROTECTION
DESC: Nuclear Weapon Effects ship systems surface ships L5
DESC: SURVEY
EFFT: THERMAL
SUJO: 3-122-000 ; 3-132-210 ; 3-245-000
TEMP: A7827
TITL: SURVEY OF HEAT RESISTANT MATERIALS FOR USE ON NAVY EQUIPMENT EXPOSED
TO NUCLEAR THERMAL RADIATION (U), 84 P., (C)

.block

20501

.endblock

.block

copy: 1 id: 53468-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20517
CLSS: U
CORP: HARRY DIAMOND LABORATORIES (WASH., DC)
DATE: 7406
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: TABULAR SURVEY
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: NEUTRON ; TREE
REPN: HDL DS 74 1
SUJO: 3-221-000 ; 3-222-000
TITL: RADIATION EFFECTS ON SEMICONDUCTOR DEVICES; SUMMARY OF DATA--JUNE
1974 (U), 226 P., (U)
TREE: 310 ; 320

.block

20517

.endblock

.block

copy: 1 id: 53481-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20523
ADNO: 883387
AUTH: DONOVAN R.P. ; HAUSER J.R. ; SIMONS M.

CLSS: U
CONN: F 33615 73 C 1115
CORP: RESEARCH TRIANGLE INSTITUTE (RESEARCH TRIANGLE PARK, N.C.)
DATE: 7406
DESC: THEORY EXPERIMENTAL SURVEY
DESC: Nuclear Weapon Effects electronic pieceparts L1
EFFT: TREE
REPN: RTI 43U 841 ; AFAL TR 74 61
SUJO: 3-220-000
TITL: SURVEY OF THE VULNERABILITY OF CONTEMPORARY SEMICONDUCTOR COMPONENTS
TO NUCLEAR RADIATION (U), 404 P., (U)
TREE: 300 ; 430 ; 200

.block

20523

.endblock

.block

copy: 1 id: 53484-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20539
AUTH: MARSHALL R.W. ; MYERS D.K.
CLSS: U
CONN: DAAG 39 73 C 0002
CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MOUNTAIN VIEW, CA.)
DATE: 7407
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
EFFT: TREE
REPN: HDL TR 002 1
SUJO: 3-221-000 ; 3-222-000
TITL: STUDIES OF THE NUCLEAR RADIATION PERFORMANCE OF ISOPLANAR INTEGRATED
CIRCUITS AND CIRCUIT COMPONENTS; FINAL REPORT (U), 119 P., (U)
TREE: 320 ; 430

.block

20539

.endblock

.block

copy: 1 id: 53499-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20563
AUTH: AUERBACH S.I. ; DUNAWAY P.B. ; DAHLMAN R.C.
CLSS: U
CONN: DAHC 20 70 C 0375 ; W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7312
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic uptake
L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
external L1

DESC: Nuclear Weapon Effects ecological L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1

DESC: Nuclear Weapon Effects on plants ionizing radiation chronic external
L1

DESC: SUMMARY

REPN: ORNL TM 3837

SUJO: 3-312-210 ; 3-312-220 ; 3-332-210 ; 3-332-220 ; 3-341-000

TITL: FINAL REPORT ON POSTATTACK ECOLOGY (U), 73 P., (U)

.block

20563

.endblock

.block

copy: 1 id: 53519-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20615

AUTH: BURSON Z.G.

CLSS: U

CORP: EG+G, INC. (LAS VEGAS, NV.)

DATE: 7305

DESC: Nuclear Weapon Effects land transport unhardened vehicles L5 CREW
HAZARD INSIDE VEHICLES

DESC: TABULAR SUMMARY

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
external L5

SUJO: 3-152-000 ; 3-312-210

TITL: ENVIRONMENTAL AND FALLOUT GAMMA RADIATION PROTECTION FACTORS
PROVIDED BY CIVILIAN VEHICLES (U), 4 P., (U)

.block

20615

.endblock

.block

copy: 1 id: 53569-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20619

AUTH: NORTHROP J.

CLSS: U

CORP: NAVAL UNDERSEA CENTER (SAN DIEGO, CA.)

DATE: 7304

DESC: Nuclear Weapon Environment Ground Shock cavities subsidence collapse
L1 COLLAPSE

DESC: Nuclear Weapon Environment Ground Shock seismic measurements L1

DESC: EXPERIMENTAL

SHOT: CANNIKIN

TSHO: UG-CONTAINED

SUJO: 2-620-300 ; 2-627-000

TITL: T PHASE RADIATION FROM THE CANNIKIN EXPLOSION (U), 9 P., (U)

.block

20619

.endblock

.block

copy: 1 id: 53573-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20627

ABS: NUCLEAR EXPLOSIONS; RADIOACTIVE CLOUDS; RADIOACTIVE CLOUDS; ELECTRIC
DIPOLE MOMENTS; ATMOSPHERIC EXPLOSIONS; COMPARATIVE EVALUATIONS;
FALLOUT; GAMMA RADIATION; IONIZED GASES; MATHEMATICAL MODELS; PLASMA

AUTH: HILL R.D.

CLSS: U

DATE: 7404

DESC: Nuclear Weapon Phenomenology Atmospheric Ionization Chemistry

general descriptions L1

DESC: Nuclear Weapon Environment Induced Atmospheric Electrostatic Fields

L1

DESC: THEORY

TSHO: LOW-ALT ; HI-ALT

SUJO: 2-311-000 ; 2-550-000

TITL: ELECTRIC MOMENT OF A NUCLEAR DEBRIS CLOUD (U), 4 P., (U)

.block

20627

.endblock

.block

copy: 1 id: 53581-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20643

AUTH: MANANKOVA A.V.

CLSS: U

DATE: 7306

DESC: THEORY

DESC: Nuclear Weapon Environment Induced Electromagnetic Pulse EMP L1

EMPF: 222

REPN: FTD HS 23 396 73

SUJO: 2-510-000

SYMJ: IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY, RADIOFIZIKA, VOL. 15, NO. 2,

P. 211, 1972

TITL: ELECTROMAGNETIC RADIATION FROM SOURCES OVER AN IDEALLY CONDUCTING
EXPANDING SPHERE (U), 15 P., (U)

.block

20643

.endblock

.block

copy: 1 id: 53609-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20712
AUTH: LONGINOW A. ; OJDROVICH G. ; BERTRAM L. ; WIEDERMANN A.
CLSS: U
CCDE: SURVIVABILITY
CONN: DAHC 20 68 C 0126
CORP: IIT RESEARCH INSTITUTE (CHICAGO, IL.)
DATE: 7305
DESC: Nuclear Weapon Environment Airblast static overpressure
OVERPRESSURE.L5 WITHIN ROOMS IN BLDG.
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L5
DESC: Nuclear Weapon Effects on animals thermal burns heating L5
DESC: Target Analysis civilians population at risk casualties L1
DESC: THEORY CODE
DESC: Nuclear Weapon Effects on animals blast shock pressure L5
DESC: Nuclear Weapon Effects structures aboveground buildings L5 BLAST
LOADING
EFFT: GAMMA ; THERMAL ; AIR-BLAST
REPN: IITRI J6144
SUJO: 2-611-000 ; 3-251-000 ; 3-311-100 ; 3-312-100 ; 3-313-100 ;
3-433-000
TITL: PEOPLE SURVIVABILITY IN A DIRECT EFFECTS ENVIRONMENT AND RELATED
TOPICS (U), 246 P., (U)

.block

20712

.endblock

.block

copy: 1 id: 53666-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20770
AUTH: KING J.C.
CLSS: U
CONN: AT (29 1) 789
CORP: SANDIA LABS. (ALBUQUERQUE, N.M.)
DATE: 7409
DESC: EXPERIMENTAL SUMMARY SURVEY
DESC: Nuclear Weapon Effects materials ceramics optical L1
EFFT: TREE
REPN: SAND 74 0136
SUJO: 3-241-000
TITL: HARDENING QUARTZ RESONATORS TO IONIZING RADIATION--A REVIEW (U), 17
P., (U)
TREE: 367

.block

20770

.endblock

.block

copy: 1 id: 53715-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20785
AUTH: SCOTT L.D. ; PERALA R.A. ; EZELL T.F.
CLSS: U
CONN: DAHC 60 72 C 0038
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, N.M.)
DATE: 7312
DESC: Simulation Facilities Techniques x-ray effects L1 AURORA
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1 CYLINDERS
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: IEMP
EMPF: 726 ; 391
REPN: AMRC R 20
SUJO: 3-231-000 ; 3-259-400 ; 4-231-000
TITL: COMPARISON OF CALCULATED AND MEASURED FIELDS AND CABLE CURRENTS IN A
RADIATION-DRIVEN CYLINDER (U), 63 P., (U)

.block

20785

.endblock

.block

copy: 1 id: 53729-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20812
AUTH: KLIGMAN R.L. ; LIBELO L.F.
CLSS: U
CORP: NAVAL ORDNANCE LAB. (WHITE OAK, MD.)
DATE: 7406
DESC: RF EMP shielding protection L1
DESC: THEORY
EMPF: 303 ; 304
REPN: NOLTR 74 35
SUJO: 9-810-000
TITL: SCATTERING OF ELECTROMAGNETIC RADIATION BY APERTURES VIII, THE
NORMALLY SLOTTED CYLINDER THEORY (U), 64 P., (U)

.block

20812

.endblock

.block

copy: 1 id: 53750-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20841
AUTH: MEREWETHER D.E. ; SCOTT L.D.
CLSS: SRD CNWDI
CONN: DAHC 60 72 C 0038
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, N.M.)

DATE: 7304
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
DESC: Nuclear Weapon Effects missile systems ABM electronics L1
DESC: SIMULATION (HIFEX) ; TABULAR
EFFT: IEMP
EMPF: 397
REPN: AMRC R 8
SUJO: 3-112-230 ; 3-231-000
SYST: SPRINT MISSILE
TEMP: A8302
TTTL: EXPECTED IEMP FIELDS AND CABLE CURRENTS WITHIN THE SPRINT MISSILE
EXPOSED TO AN INTENSE RADIATION ENVIRONMENT (U), 15 P., (SRD CNWDI)

.block

20841

.endblock

.block

copy: 1 id: 53778-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20873
AUTH: MAIENSCHIN F.C.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7410
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1
DESC: Cross Sections neutron L1
DESC: EXPERIMENTAL SURVEY
REPN: ORNL 4997
SUJO: 4-140-000 ; 9-820-000
TTTL: NEUTRON PHYSICS DIVISION PROGRESS REPORT FOR PERIOD ENDING AUGUST
31, 1974 (U), 133 P., (U)
TREE: 412 ; 642

.block

20873

.endblock

.block

copy: 1 id: 53800-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20880
ADNO: 530585L
AUTH: EVERETT W.W. JR. ; PEELE W.D. ; SALATI O.M. ; COREY L. ; GILLETTE
M.R. ; JOY E. ; BENZEL D. ; GILMOUR A.S. JR. ; CLASSER C. ; NOWOCIEN
M.A.
CLSS: C
CONN: F 30602 72 C 0438 ; F 30602 72 C 0409 ; F 30602 72 C 0415
CORP: PURDUE UNIVERSITY (LAFAYETTE, IN.)
DATE: 7403

DESC: Nuclear Weapon Effects Communications Systems C4 hardware hardware

L1

DESC: THEORY EXPERIMENTAL

EFFT: EMP

EMPF: 430 ; 410 ; 324

REPN: RADC TR 74 72

SUJO: 3-131-000

TEMP: A8286

TITL: NORAD CHEYENNE MOUNTAIN COMPLEX AND ITS ELECTROMAGNETIC RADIATION
SUSCEPTIBILITY (U), 185 P., (C)

.block

20880

.endblock

.block

copy: 1 id: 53805-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 20888

ABS: This report presents a summary of the Transient Radiation Effects on Electronics (TREE) and Electromagnetic Pulse (EMP) analysis and hardening performed under program S48-14X, nuclear warfare survivability of ships. The maximum tactical radiation levels of concern to shipboard electronic systems and typical effects of this radiation on electronics is discussed. The EMP threat is also covered. General nuclear vulnerability system analysis procedures are presented. EMP damage mechanisms associated with electronic components, methods for EMP testing these components, screening procedures, and piece-part EMP hardening methods are investigated. Vulnerability and hardening studies performed on specific systems and the results of these are then addressed.

ABS: These include the ex-USS Valcour (a test ship), the R-1051B high frequency (HF) receiver system, the DLGN-38 anti-war warfare system, the UYK-7 computer, Shortstop (an electronic countermeasures system), the SPS-48 radar, the mark 74 MOD 6 missile fire control system, and the Standard Missile. Finally, current ship practices that are objectionable from an EMP viewpoint, EMP hardening guidelines for ships, and a list of conclusions and recommendations resulting from the work discussed in this report are presented.

ADNO: 529827L

AUTH: MOSKAITIS J.V.

CLSS: S

CORP: NAVAL ORDNANCE LAB. (WHITE OAK, MD.)

DATE: 7401

DESC: Nuclear Weapon Effects ship systems surface ships L1

DESC: SIMULATION (EMPRESS) ; EXPERIMENTAL SURVEY

EFFT: EMP ; TREE

EMPF: 321 ; 380 ; 323

REPN: NOLTR 74 017

SUJO: 3-122-000

TEMP: A8305

TITL: NUCLEAR VULNERABILITY ASSESSMENT OF TACTICAL SHIPBOARD ELECTRONIC
SYSTEMS (U), 237 P., (S)

TNFF: 5890
TREE: 341 ; 399

.block
20888
.endblock

.block
copy: 1 id: 53811-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20905
CLSS: U
CONN: F 04701 73 C 0201
CORP: HSS, INC. (BEDFORD, MA.)
DATE: 7312
DESC: PROGRAM III
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1 DATA REDUCTION TECHNIQUES
FILM CALIBRATIONS
REPN: HSS B004
SUJO: 4-820-600
TITL: PROJECT III OPTICAL DATA PACKAGE (U), CA. 150 P., (U)

.block
20905
.endblock

.block
copy: 1 id: 53819-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20912-360
AUTH: KALMA A.H. ; CESENA R.A. ; NABER J.A.
CLSS: S
CONN: F 04701 71 C 0334
CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)
DATE: 7401
DESC: SIMULATION (LINAC)
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L5 SPACE AND WEAPON RADIATION
DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L5
AMPLIFIERS MOSFETS
EFFT: TREE
SUJO: 3-133-000 ; 3-213-000
SYMJ: JOINT STRATEGIC SCIENCES MEETING; VOL. 2
TITL: BEHAVIOR OF INFRARED DETECTORS AND PREAMPLIFIERS IN NUCLEAR AND
SPACE RADIATION ENVIRONMENTS (U), 7 P., (S)
TREE: 361

.block
20912-360
.endblock

.block
copy: 1 id: 53826-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 20963
ADNO: 787640
AUTH: WILSON D.M. ; KATZ B.S. ; DEMSKE D.
CLSS: U
CORP: NAVAL ORDNANCE LAB. (SILVER SPRING, MD.)
DATE: 7404
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects ship systems surface ships L1 DECKHOUSE
PLATES AL
EFFT: THERMAL
REPN: NOLTR 74 59
SUJO: 3-122-000
TTTL: USE OF WATER COOLING FOR PROTECTION AGAINST THERMAL RADIATION FROM A
NUCLEAR WEAPON DETONATION (U), 107 P., (U)

.block

20963

.endblock

.block

copy: 1 id: 53860-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21003
ADNO: B000403L
AUTH: RHOADES W.A. ; BUHL A.R. ; EMMETT M.B. ; HAYNES G.C. ; HINTON R.J. ;
HOFFMAN T.J. ; MORRISON G.W. ; PACE J.V. ; PETRIE L.M. ; WILLIAMS
L.R.

CLSS: U
CCDE: VCS (RADIATION SHIELDING) ORNL
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7410
DESC: Nuclear Weapon Effects land transport armored vehicles L1 FIELDS
INSIDE ARMORED VEHICLES
EFFT: NEUTRON ; GAMMA
REPN: ORNL TM 4664
SUJO: 3-151-000
TTTL: DEVELOPMENT OF A CODE SYSTEM FOR DETERMINING RADIATION PROTECTION OF
ARMORED VEHICLES (THE VCS CODE) (U), 87 P., (U)

.block

21003

.endblock

.block

copy: 1 id: 53867-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21071-114

AUTH: THOMAS C.W. ; SILKER W.B. ; JENKINS C.E.
CLSS: U
CORP: BATTELLE PACIFIC NORTHWEST LABS. (RICHLAND, WA.)
DATE: 7304
DESC: Nuclear Weapon Environment fallout intensity contours patterns L1 IN
WASHINGTON
DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1
DESC: EXPERIMENTAL
SHOT: cpr(72-03-18)
SUJO: 2-223-410 ; 2-225-100
SYMJ: PACIFIC NORTHWEST LABORATORY ANNUAL REPORT FOR 1972 TO THE USAEC
DIVISION OF BIOMEDICAL AND ENVIRONMENTAL RESEARCH; VOL. 2, PT. 1
TITL: BEHAVIOR AND CHARACTERISTICS OF RADIOACTIVE DEBRIS FROM CHINESE
NUCLEAR WEAPONS TESTS (U), 3 P., (U)

.block

21071-114

.endblock

.block

copy: 1 id: 53904-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21071-117
AUTH: THOMAS C.W.
CLSS: U
CORP: BATTELLE PACIFIC NORTHWEST LABS. (RICHLAND, WA.)
DATE: 7304
DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1
1961 TO 1971
DESC: EXPERIMENTAL
SUJO: 2-223-410
SYMJ: PACIFIC NORTHWEST LABORATORY ANNUAL REPORT FOR 1972 TO THE USAEC
DIVISION OF BIOMEDICAL AND ENVIRONMENTAL RESEARCH; VOL. 2, PT. 1
TITL: PLUTONIUM CONCENTRATIONS IN SURFACE AIR AT RICHLAND, WASHINGTON (U),
3 P., (U)

.block

21071-117

.endblock

.block

copy: 1 id: 53905-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21071-120
AUTH: THOMAS C.W. ; YOUNG J.A.
CLSS: U
CORP: BATTELLE PACIFIC NORTHWEST LABS. (RICHLAND, WA.)
DATE: 7304
DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1
1961 THRU 1972
SUJO: 2-223-410
SYMJ: PACIFIC NORTHWEST LABORATORY ANNUAL REPORT FOR 1972 TO THE USAEC

DIVISION OF BIOMEDICAL AND ENVIRONMENTAL RESEARCH; VOL. 2, PT. 1
TITL: ATMOSPHERIC RADIONUCLIDE CONCENTRATIONS AT RICHLAND, WASHINGTON AND
AT POINT BARROW, ALASKA (U), 3 P., (U)

.block

21071-120

.endblock

.block

copy: 1 id: 53906-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21083

ABS: Monte Carlo simulation of weapon system mission events is used as a stochastic modeling context in which the effects of joint degradation of a man and machine following exposure to ionizing radiation are considered. These effects are then mathematically related to systems effectiveness measures of mission success. The Siegel-Wolf two-man operator model performs the simulation and provides essential analytical output. The mission is represented as a network of discrete man and machine tasks which consume time. Individual differences in operators in such areas as proficiency or speed, accuracy, and time to perform a given task are based on experimental and field human performance data and may be characterized as a random variable. The operator is viewed as a workload manager and must schedule his tasks to complete them within the allotted mission time.

ABS: Both human and equipment degradation postirradiation are represented by a set of performance curves that serve as the primary input parameters to the simulation model for nuclear survivability/vulnerability analysis.

ADNO: 762528

AUTH: SEIFERT D.J. ; CHUBB G.P.

CLSS: U

CORP: AIR FORCE SYSTEMS COMMAND (WRIGHT-PATTERSON AFB, OH.)

DATE: 7304

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
POSSIBLE MODEL OF AIRCREW PERFORMANCE AFTER SUPRALETHAL DOSE
DISCUSSED

EFFT: NEUTRON ; GAMMA

REPN: AMRL TR 72 69

SUJO: 3-312-100

TITL: COMPUTER MODELS OF MAN-MACHINE SURVIVABILITY/VULNERABILITY (U), 28
P., (U)

.block

21083

.endblock

.block

copy: 1 id: 53922-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21097

ADNO: C000248L
AUTH: FRANK B.V.
CLSS: SRD
CCDE: ELTRAN (E TRANSPORT)
CORP: PICATINNY ARSENAL (DOVER, N.J.)
DATE: 7411
DESC: SIMULATION (E BEAM) ; THEORY EXPERIMENTAL TABULAR
DESC: Nuclear Weapon Effects ordnance electroexplosive devices fuses L1
EFFT: X-RAY ; IEMP ; TREE
EMPF: 396
REPN: PA TR 4585
SHOT: MINT LEAF ; HUDSON SEAL ; DIAMOND SCULLS ; DIAGONAL LINE
TSHO: UG-CONTAINED
SUJO: 3-162-000
TEMP: A8584
TITL: SHOCK, ELECTRON BEAM, UNDERGROUND, AND IEMP VULNERABILITY TESTING OF
ELECTROEXPLOSIVE DEVICES AND RADIATION-INDUCED INITIATION MECHANISMS
OF ELECTROEXPLOSIVE DEVICES (U), 223 P., (SRD)

TREE: 394

.block

21097

.endblock

.block

copy: 1 id: 53929-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21110
AUTH: CHADSEY W.L.
CLSS: U
CCDE: POEM (ELECTRON TRANSPORT) GENERAL ELECTRIC
CONN: F 19628 71 C 0198
CORP: GENERAL ELECTRIC CO., RE-ENTRY AND ENVIRONMENTAL SYSTEMS DIV.
(PHILADELPHIA, PA.)

DATE: 7311

DESC: Nuclear Weapon Effects structures aboveground models plates slabs L1

DESC: Radiation Transport electron L1

DESC: Radiation Transport gamma L1

DESC: THEORY TABULAR

DESC: Nuclear Weapon Effects materials metals alloys L1 AU AL

DESC: Radiation Transport x-ray L1

EFFT: IEMP ; TREE

EMPF: 391

REPN: SAI 73 578 AR ; AFCRL TR 73 0572

SUJO: 3-243-000 ; 3-259-300 ; 9-620-000 ; 9-640-000 ; 9-680-000

TITL: MONTE CARLO ANALYSIS OF X-RAY AND GAMMA-RAY TRANSITION ZONE DOSE AND
PHOTO-COMPTON CURRENT (U), 52 P., (U)

.block

21110

.endblock

.block

copy: 1 id: 53937-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21111
ADNO: 923932L
AUTH: POWELL R.J.
CLSS: U
CONN: F 19628 74 C 0132
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA.)
DATE: 7407
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 HARDENING DEVELOPMENT MIS
DESC: THEORY EXPERIMENTAL
EFFT: UV AND HIGH FIELDS
REPN: AFCRL TR 74 0330 ; PRRL 74 CR 48
SUJO: 3-221-000
TITL: RADIATION AND CHARGE INJECTION IN AI 2 O 3 USING NEW TECHNIQUES (U),
30 P., (U)
TREE: 200

.block
21111
.endblock

.block
copy: 1 id: 53938-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21119
AUTH: CHERRY J.T. ; SACK S. ; MAENCHEN G. ; KRANSKY V.
CLSS: U
CCDE: TENSOR (HYDRO GROUND SHOCK) LLL
CORP: LAWRENCE RADIATION LAB. (LIVERMORE, CA.)
DATE: 7400
DESC: THEORY CODE
DESC: Fluid Mechanics hydrodynamics L1
DESC: Nuclear Weapon Environment Ground Shock impact pressure stress L1
REPN: UCRL 50987
SUJO: 2-623-000 ; 9-410-000
TITL: TWO-DIMENSIONAL STRESS-INDUCED ADIABATIC FLOW (U), 61 P., (U)

.block
21119
.endblock

.block
copy: 1 id: 53946-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21138
AUTH: HARTMAN E.F. ; SCOTT C.G. ; GOVER J.E. ; BRUMLEY F.B.
CLSS: SRD
CONN: AT (29 1) 789
CORP: SANDIA LABS. (ALBUQUERQUE, N.M.)

DATE: 7408
DESC: Nuclear Weapon Effects ordnance explosives L1 LEAD AZIDE INITIATION
EFFT: X-RAY ; IEMP
REPN: SLA 74 0168 ; RS 2115/072
SHOT: DIDO QUEEN
SUJO: 3-163-000
TEMP: A8538
TTTL: INITIATION MECHANISM OF LEAD AZIDE AT LOW DOSE LEVELS IN A RADIATION
ENVIRONMENT (U), 35 P., (SRD)

.block

21138

.endblock

.block

copy: 1 id: 53960-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21142
AUTH: CHING J. ; GOLDSTEIN H. ; OBLOW E.M.
CLSS: U
CCDE: MOMANS (NEUTRON TRANSPORT) ; SPTANS (NEUTRON TRANSPORT)
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)
DATE: 7412
DESC: THEORY TABULAR
DESC: Radiation Transport neutron L1 IRON
DESC: Cross Sections neutron L1
REPN: ORNL TM 4235
SUJO: 9-650-000 ; 9-820-000
TTTL: APPLICATION OF A DISCRETE-ENERGY, DISCRETE-ORDINATES TECHNIQUE TO
THE STUDY OF NEUTRON TRANSPORT IN IRON (U), 119 P., (U)
TREE: 412 ; 970

.block

21142

.endblock

.block

copy: 1 id: 53962-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21154
CLSS: U
CCDE: IDEA (GENERAL NUCLEAR ENVIRONMENT MODELLING) SAI
CONN: DNA 001 73 C 0015
CORP: SCIENCE APPLICATIONS, INC. (HUNTSVILLE, AL.)
DATE: 7411
DESC: CODE SUMMARY
DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L5
REPN: SAI 75 562 HU
SUJO: 4-140-000
TTTL: INTRODUCTORY DESCRIPTION OF THE IDEA CODE (U), 20 P., (U)

.block
21154
.endblock
.block

copy: 1 id: 53973-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21158
ABS: This report discusses radiation effects on passive optical sensor
components.
ADNO: 529541L
AUTH: BREUCH R.A. ; JUNG A F.A. ; NELSON E.D. ; FRITZ E.G. ; HAMAMOTO A.S.
CLSS: SRD
CONN: F 04701 72 C 0334
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7312
DESC: SIMULATION (E BEAM) ; THEORY EXPERIMENTAL
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: Nuclear Weapon Effects materials ceramics optical L1
EFFT: X-RAY
REPN: SAMSO TR 74 19 ; LMSC B324459
SHOT: MISTY NORTH
TSHO: UG-CONTAINED
SUJO: 3-241-000 ; 4-231-000
TEMP: A8603
TITL: RADIATION EFFECTS ON PASSIVE OPTICAL SENSOR COMPONENTS (U), CA. 300
P., (SRD)
TREE: 361

.block
21158
.endblock
.block

copy: 1 id: 53977-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21170
AUTH: BARRETT T.J. ; HARE R.J. ; HEBNER C. ; THOMPSON J.
CLSS: CFRD
CONN: DAAD 05 73 C 0522
CORP: GENERAL ELECTRIC-TEMPO (SANTA BARBARA, CA.)
DATE: 7412
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1
DESC: THEORY
DESC: Nuclear Weapon Environment Induced Fireball Thermal Noise Antenna
Excess Temperature L1
REPN: BRL CR 195 ; 74 TMP 34
TSHO: LOW-ALT ; HI-ALT
SUJO: 2-130-000 ; 2-410-000
TEMP: A8616

TITL: BREMSSTRAHLUNG RADIATION IN A NUCLEAR ENVIRONMENT (U), 71 P., (CFRD)

.block

21170

.endblock

.block

copy: 1 id: 53983-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21173

CLSS: U

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7308

DESC: Nuclear Weapon Effects ecological L1

DESC: PU AM U ; BIBLIOGRAPHY

DESC: Nuclear weapon safety radiological L5

REPN: ORNL EIS 73 21 (SUPPL. 1)

SUJO: 3-341-000 ; 4-838-100

TITL: ENVIRONMENTAL ASPECTS OF PLUTONIUM AND OTHER ELEMENTS; A SELECTED, ANNOTATED BIBLIOGRAPHY (U), 476 P., (U)

.block

21173

.endblock

.block

copy: 1 id: 53984-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21180

AUTH: GREEN B.A. ; LEADON R.E. ; MALLON C.E. ; NABER J.A.

CLSS: U

CONN: F 19628 72 C 0311

CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)

DATE: 7406

DESC: SIMULATION (ELECTRON BEAM ISOTOPE) ; THEORY EXPERIMENTAL

DESC: Nuclear Weapon Effects materials ceramics optical L1

EFFT: TREE

REPN: AFCRL TR 74 0313 ; INTEL RT 8027 008

SUJO: 3-241-000

TITL: STUDY OF THE EFFECTS OF RADIATION ON THE ELECTRICAL AND OPTICAL PROPERTIES OF HGCDTE (U), 96 P., (U)

TREE: 361

.block

21180

.endblock

.block

copy: 1 id: 53991-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21182

AUTH: COLOMBANT D.G. ; WINSOR N.K.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., D.C.)
DATE: 7412
DESC: THEORY
DESC: Cross Sections x-ray L1
REPN: NRL MR 2946
SUJO: 9-840-000
TITL: ACCURATE ECONOMICAL NUMERICAL RADIATION TRANSPORT ALGORITHM (U), 20
P., (U)
TREE: 980

.block
21182
.endblock
.block

copy: 1 id: 53993-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21197
ADNO: C 000924
AUTH: FLANAGAN T.M. ; LEADON R.E. ; MALLON C.E.
CLSS: SRD
CCDE: GRAP2 ; XRANC ; SANDYL
CONN: F 29601 72 C 0076
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7411
DESC: SIMULATION (LINAC FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: IEMP ; TREE
EMPF: 392
REPN: AFWL TR 73 295 ; IRT 8026 007S
SUJO: 3-220-200 ; 3-231-000
TEMP: A9515
TITL: INVESTIGATION OF CABLE RESPONSE TO X RADIATION (U), 126 P., (SRD)

.block
21197
.endblock
.block

copy: 1 id: 54006-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21224
AUTH: BRUMLEY F.B. ; EVANS D.C. ; MANGAN D.L.
CLSS: U
CCDE: NUCYL ; SANDYL
CORP: SANDIA LABS. (ALBUQUERQUE, N.M.)
DATE: 7312
DESC: SIMULATION (ELECTRON BEAM GENERATOR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1 CYLINDRICAL CAVITY
DESC: test instruments electronic vulnerability EMP L1
EFFT: EMP
EMPF: 391
REPN: SLA 73 0615
SUJO: 3-259-400 ; 4-371-000
TITL: ON THE RADIATION-PRODUCED ELECTROMAGNETIC RESPONSE OF A
DIELECTRIC-FILLED CYLINDRICAL CAVITY--A COMPARISON OF THEORY AND
EXPERIMENT (U), 35 P., (U)

.block

21224

.endblock

.block

copy: 1 id: 54029-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21235
AUTH: BOOK D.L. ; OSSAKOW S.L. ; GOLDMAN S.R.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7410
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: THEORY
DESC: Meteorology L1
REPN: NRL MR 2890
SUJO: 5-500-000 ; 5-800-000
TITL: COUPLED BARIUM CLOUD-IONOSPHERE SYSTEMS; 3-NEUTRAL WIND EFFECTS IN
THE SMALL CLOUD APPROXIMATION (U), 14 P., (U)

.block

21235

.endblock

.block

copy: 1 id: 54038-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21265
AUTH: GAMBILL B. ; FENIGER E.J. ; RUTHERFORD R.
CLSS: C
CCDE: WRECS V
CONN: DCA 100 72 C 0031
CORP: GENERAL ELECTRIC-TEMPO (SANTA BARBARA, CA.)
DATE: 7308
DESC: CODE
REPN: 73 TMP 15
TEMP: A3951
TITL: WRECS V; A FORTRAN CODE FOR COMPUTATION OF WEAPON RADIATION EFFECTS
ON COMMUNICATIONS SYSTEMS; VOL. 3, THE COMPUTER ROUTINES (U), 335
P., (C)

.block

21265

.endblock

.block

copy: 1 id: 54055-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21278

AUTH: CARTER L.L.

CLSS: SRD CNWDI

CONN: W 7405 ENG 36

CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)

DATE: 7402

DESC: SIMULATION ; THEORY

DESC: Nuclear Weapon Environment Prompt Neutron angular distribution L5

DESC: Nuclear Weapon Effects ordnance bombs mines warheads nuclear L1 MK 4

DESC: Radiation Transport neutron L1

EFFT: NEUTRON

REPN: LA 5549 MS

TSHO: HI-ALT

SUJO: 1-130-000 ; 3-161-100 ; 9-650-000

TEMP: A7638

TITL: SCALING OF NEUTRON FLUXES IN THE ATMOSPHERE FOR VULNERABILITY
CALCULATIONS APPLICABLE TO THE MK-4 (U), 13 P., (SRD CNWDI)

TREE: 970 ; 397

.block

21278

.endblock

.block

copy: 1 id: 54065-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21291

ADNO: 532180L

AUTH: MOBLEY T.S. ; OLSON C.T. ; YINGLING W.A.

CLSS: C

CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, N.M.)

DATE: 7411

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1

DESC: Nuclear Weapon Effects on animals thermal burns heating L1

DESC: SUMMARY

DESC: Nuclear Weapon Effects on animals thermal ocular effects L1

DESC: Nuclear Weapon Effects flight systems airplanes crew L1

EFFT: GAMMA ; THERMAL

REPN: AFWL TR 74 176

TSHO: SURFACE ; LOW-ALT

SUJO: 3-111-500 ; 3-312-100 ; 3-313-100 ; 3-313-200

TEMP: A8842

TITL: B-52 CREW VULNERABILITY TO NUCLEAR ENVIRONMENTS (U), 46 P., (C)

.block

21291

.endblock

.block

copy: 1 id: 54071-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21302

AUTH: FEDDER J.A. ; OSSAKOW S.L.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., D.C.)

DATE: 7411

DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped

Radiation Particle Fluxes Space Radiation L1

REPN: NRL MR 2933

SUJO: 5-800-000

TITL: IONOSPHERIC CONDUCTANCE FOR SUB-AURORAL LATITUDES AT EQUINOX

TWILIGHT (U), 16 P., (U)

.block

21302

.endblock

.block

copy: 1 id: 54081-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21303

AUTH: COLOMBANT D.G. ; WHITNEY K.G. ; WINSOR N.K. ; DAVIS J. ; TIDMAN D.A.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7412

DESC: Directed Energy Weapons Lasers Applications High-intensity radiation

field generation L1

DESC: Simulation Facilities Techniques x-ray effects L1

REPN: NRL MR 2954

SHOT: ZZ (LASER GENERATION OF X RAYS) NRL ; LASNEX (LASER GEN OF X RAYS)

LLL

SUJO: 3-616-750 ; 4-231-000

TITL: LASER TARGET MODEL (U), 49 P., (U)

.block

21303

.endblock

.block

copy: 1 id: 54082-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21321

ADNO: A006295

AUTH: LEAHY E.J. ; OLTMANS D.L. ; SNELL C.M. ; LANE W.B. ; DONLAN T.J.

CLSS: U

CORP: ARMY ENGINEER WATERWAYS EXPERIMENT STATION (LIVERMORE, CA.)
DATE: 7412
DESC: EXPERIMENTAL
DESC: Simulation Facilities Techniques nuclear radiation fallout
simulation L1 IRIDIUM PARTICLES AS TRACERS IN CHEMICAL EXPLOSIVE
REPN: AEWES TR E 74 3
HESO: Middle Course 2 ; M4 ; M9 ; M13 ; M16
SUJO: 4-242-000
TITL: FALLOUT SIMULATION--NUCLEAR CRATERING DEVICE SIMULATION (PROJECT
DIAMOND ORE) (U), 355 P., (U)

.block

21321

.endblock

.block

copy: 1 id: 54119-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21328
AUTH: LEADON R.E. ; GREEN B.A. ; BERGER R.A. ; CESENA R.A.
CLSS: U
CONN: F 19628 72 C 0349
CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)
DATE: 7407
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: TREE
REPN: AFCRL TR 74 0383 ; IRT 8028 006
SUJO: 3-133-000
TITL: ANALYSIS OF PERFORMANCE OF IR DETECTORS UNDER RADIATION ENVIRONMENTS
(U), 80 P., (U)

TREE: 361

.block

21328

.endblock

.block

copy: 1 id: 54122-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21362
AUTH: WILSEY E.F. ; MALONEY J.C. ; TOMPKINS R.C.
CLSS: U
CCDE: DELFIC
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7412
DESC: Nuclear Weapon Environment radiation decay gamma decay L1
DESC: CODE
REPN: BRL MR 2424
SUJO: 2-223-420
TITL: DEPARTMENT OF DEFENSE LAND FALLOUT PREDICTION SYSTEM OUTPUT

PROCESSOR - SIMPLIFIED CALCULATION OF INTEGRATED GAMMA EXPOSURE (U),
47 P., (U)

.block

21362

.endblock

.block

copy: 1 id: 54146-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21373

AUTH: EMMETT M.B.

CLSS: U

CCDE: MORSE (RAD TRANSPORT) ORNL

CONN: W 7405 ENG 26

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7502

DESC: Radiation Transport neutron L1

DESC: CODE THEORY

DESC: Radiation Transport gamma L1

REPN: ORNL 4972

SUJO: 9-620-000 ; 9-650-000

TITL: MORSE MONTE CARLO RADIATION TRANSPORT CODE SYSTEM (U), CA. 200 P.,
(U)

TREE: 970 ; 960

.block

21373

.endblock

.block

copy: 1 id: 54153-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21386

AUTH: COLOMBANT D.G. ; WINSOR N.K.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7502

DESC: Radiation Transport visible L1 TRANSPORT ALGORITHM

REPN: NRL MR 2984

SUJO: 9-630-000

TITL: RADIATION TRANSPORT IN AXISYMMETRIC GEOMETRIES (U), 20 P., (U)

.block

21386

.endblock

.block

copy: 1 id: 54159-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21389

ABS: This is a two-part report. The first part considers the feasibility of developing an analytic computer code for calculating the thermal environment from nuclear detonations in the atmosphere. The utilization and accuracies of both theoretical and experimental data are considered. The second part is a compendium of thermal data from nuclear atmospheric tests.

ADNO: C 001012L
AUTH: THOMPSON J.H. ; REITZ D.
CLSS: SRD
CONN: DAAD 05 74 C 0789
CORP: GENERAL ELECTRIC-TEMPO (SANTA BARBARA, CA.)
DATE: 7501
DESC: Nuclear Weapon Environment Visible Output L1
DESC: Nuclear Weapon Environment Ultraviolet Output energy spectrum L1
DESC: EXPERIMENTAL TABULAR SURVEY
DESC: Nuclear Weapon Environment Infrared Output energy spectrum L1
DESC: Nuclear Weapon Environment Ultraviolet Output rate L1
DESC: Nuclear Weapon Environment Thermal Output L1
DESC: Nuclear Weapon Environment Infrared Output rate L1
REPN: BRL CR 202 ; 74 TMP 31
SUJO: 1-200-000 ; 1-320-000 ; 1-340-000 ; 1-400-000 ; 1-520-000 ;
1-540-000
TEMP: A8907
TITL: COMPUTER BASE AND NUCLEAR TEST DATA FOR A THERMAL RADIATION CODE
(U), 320 P., (SRD)
TNFF: 4840 ; 4845
.block
21389
.endblock
.block
copy: 1 id: 54162-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21431
AUTH: ANDERSON R.C. ; BORING A.M. ; JONES E.M. ; KODIS J.W. ; ROACH W.T. ;
SANDFORD M.T. II
CLSS: SRD CNWDI
CCDE: YAQUI (FIREBALL) LASL ; RADFLO (FIREBALL) LASL
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM)
DATE: 7409
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Environment Visible Output rate L1
DESC: Nuclear Weapon Environment Ultraviolet Output rate L1
DESC: Nuclear Weapon Effects meteorological Atmospheric Heating L1 EARLY
TIME ENERGY DEPOSITION
REPN: LA 5736 MS
TSHO: LOW-ALT
SOCE: SPRINT

SUJO: 1-440-000 ; 1-540-000 ; 2-110-000 ; 2-130-000 ; 2-730-000
TEMP: A9063
TITL: SPRINT--RADIATION TRANSPORT, BLAST AND FIREBALL GROWTH IN AIR AT LOW
ALTITUDES (U), 58 P., (SRD CNWDI)

.block

21431

.endblock

.block

copy: 1 id: 54206-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21478
ADNO: B001223
AUTH: BROECKER B. ; CLAUSEN K. ; JOHNSEN P. ; SCHNEIDER-KUEHNLE P. ;
WEINERT M.

CLSS: U

CORP: BUNDESMINISTERIUM DER VERTEIDIGUNG (WEST GERMANY)

DATE: 7400

DESC: Radiation Transport neutron L1

DESC: EXPERIMENTAL

LA: W. GERMANY

REPN: BMVG FBWT 74 13

SUJO: 9-650-000

TITL: SCALAR RADIATION FIELD OF A NEUTRON SOURCE IN LIQUID AIR (U), 38 P.,
(U)

TREE: 970

.block

21478

.endblock

.block

copy: 1 id: 54242-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21502
AUTH: FREDERICKSON A.R.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA.)

DATE: 7411

DESC: Nuclear Weapon Effects structures aboveground models plates slabs L1

DESC: Radiation Transport electron L1

DESC: THEORY

EFFT: IEMP ; TREE

EMPF: 391

REPN: AFCRL TR 74 0582 ; PSRP 613

SUJO: 3-259-300 ; 9-680-000

TITL: RADIATION INDUCED ELECTRICAL CURRENT AND VOLTAGE IN DIELECTRIC
STRUCTURES (U), 60 P., (U)

TREE: 990 ; 385

.block

21502

.endblock

.block

copy: 1 id: 54253-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21520
AUTH: LIVINGSTON P.M. ; HAYES J.N. ; SCHRIEMPF J.T. ; ANDERSON J.R.
CLSS: S
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7409
DESC: Directed Energy Weapons Lasers RDT&E Programs L1
DESC: test instruments IR L1
REPN: NRL MR 2874
SUJO: 3-610-400 ; 4-383-000
TEMP: A8889
TITL: NRL OPTICAL RADIATION PROGRAM PROGRESS REPORT, 15 OCTOBER 1973 TO 15
APRIL 1974 (U), 364 P., (S)

.block

21520

.endblock

.block

copy: 1 id: 54266-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21526
AUTH: COHEN S.
CLSS: U
CONN: N 00014 74 C 0079
CORP: RCA CORP. (SOMERVILLE, NJ)
DATE: 7503
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 COS/MOS MATERIALS
DESC: EXPERIMENTAL
REPN: PRRL 75 CR 16
SUJO: 3-229-000
TITL: TOTAL-DOSE RADIATION-HARDENED COS/MOS INTEGRATED CIRCUITS (U), 40
P., (U)
TREE: 325 ; 430

.block

21526

.endblock

.block

copy: 1 id: 54272-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21527
AUTH: MALLON C.E. ; GREEN B.A. ; LEADON R.E. ; NABER J.A.
CLSS: U

CONN: F 19628 72 C 0311
CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)
DATE: 7412
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 BASIC MATERIALS HGCDTE
DESC: SIMULATION (E BEAM NEUTRONS) ; EXPERIMENTAL
EFFT: TREE
REPN: AFCRL TR 75 0018 ; INTEL RT 8027 012
SUJO: 3-229-000
TTTL: STUDY OF THE EFFECTS OF RADIATION ON THE ELECTRICAL AND OPTICAL
PROPERTIES OF HGCDTE (U), 66 P., (U)
TREE: 200

.block

21527

.endblock

.block

copy: 1 id: 54273-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21547
ADNO: C000371L
AUTH: DUPREE S.A. ; KULL L.A. ; LATKO R.J.
CLSS: SRD
CCDE: MTA (RADIATION HYDRO) SAI
CONN: DAAD 05 74 C 0767
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7410
DESC: LOW YIELD ; THEORY TABULAR
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1
DESC: Nuclear Weapon Phenomenology Fireball Energy Partition Energy
Coupling L5 P 19
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1 TEMPERATURE DENSITY
DESC: Nuclear Weapon Environment Prompt Neutron dose rate pulse width L1
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L1
REPN: BRL CR 190 ; SAI 74 227 LJ
TSHO: HI-ALT
SUJO: 1-120-000 ; 1-140-000 ; 2-130-000 ; 2-150-000 ; 2-211-000 ;
2-212-000 ; 2-213-000
TEMP: A9244
TTTL: CHARACTERIZATION OF EARLY-TIME DEBRIS (U), 60 P., (SRD)

.block

21547

.endblock

.block

copy: 1 id: 54287-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21578

ABS: Aircraft penetrating radioactive dust clouds are exposed to an environment which could prove to be mission crippling. The performances of the crew of the aircraft, the mission critical electronics equipment, and/or the engines could be degraded sufficiently to compromise the mission completion capability of the aircraft. A detailed examination of the hazards associated with cloud penetrations has been performed. It was found that the major hazards to the crew consist of the ionizing doses and dose rates from being surrounded by the radioactive cloud and from dust which accumulates in the cockpit during penetration, and the radiation burns of skin in direct contact with the dust. The major hazard to electronics equipment is due to the dose accumulated from dust accumulated in the plenum chambers of black boxes which are cooled by an open cycle process.

ABS: It is shown that significant protection can be provided for the crew and avionics equipment by the installation of filters. General techniques are presented for selecting filter design criteria for the crew and equipment environment control systems.

ADNO: A000419

AUTH: PATRICK R.P. ; ARNETT G.D. ; YINGLING W.A.

CLSS: U

CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)

DATE: 7409

DESC: Nuclear Weapon Environment radiation decay gamma decay L1

DESC: Nuclear Weapon Effects flight systems airplanes crew L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic L1

DESC: Nuclear Weapon Environment Fallout Particles size distribution L1

REPN: AFWL TR 73 82

SUJO: 2-222-300 ; 2-223-420 ; 3-111-500 ; 3-312-200

TITL: AIRCRAFT PENETRATION OF CLOUDS GENERATED BY NUCLEAR BURSTS (U), 280 P., (U)

.block

21578

.endblock

.block

copy: 1 id: 54312-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21585

ADNO: 914673L

AUTH: SCHMOKE M.A. ; POST W.J.

CLSS: U

CORP: ARMY BALLISTIC RESEARCH LAB. (ABERDEEN PROVING GROUND, MD)

DATE: 7310

DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear radiation transport L1

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects land transport armored vehicles L1

TRANSMISSION FACTORS PROTECTION FACTORS

EFFT: GAMMA
REPN: BRL R 1678
SUJO: 3-151-000 ; 4-140-000
TTTL: RESIDUAL RADIATION SHIELDING CHARACTERISTICS OF THE M60A1E2 TANK
(U), 46 P., (U)

.block

21585

.endblock

.block

copy: 1 id: 54318-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21595
AUTH: JOHNSON P.G. ; WHAN G.A. ; BELL P.A.
CLSS: U
CONN: NSF GT 21
CORP: WESTERN INTERSTATE NUCLEAR BOARD (LAKEWOOD, CO.)
DATE: 7309
DESC: TABULAR
DESC: Nuclear Weapon Environment Fallout Radioproperties L5
DESC: Nuclear Energy Peaceful Applications radiation problems L1
DESC: Nuclear Energy Power Nuclear Materials waste disposal L1
REPN: PB 237242 ; NSF RA G 73 044
SUJO: 2-223-000 ; 3-480-400 ; 3-530-000
TTTL: PLOWSHARE TECHNOLOGY ASSESSMENT--RADIOACTIVE CONTAMINATION (U), 53
P., (U)

.block

21595

.endblock

.block

copy: 1 id: 54326-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21646
ABS: The output of several techniques currently used to predict ranges of blast damage and thermal effects on personnel are compared. Four sources are used: The DNA Effects Manual EM-1 (1972), The DIA Vulnerability Handbook (1969, with changes of September 1972), The DNA Effects Manual EM-1 (1968), and Personnel Risk and Casualty Criteria for Nuclear Weapons Effects ACN 4260, published by The Combat Developments Command (CDC), 1971. Comparisons are made for the following equipment categories: wheeled vehicles, artillery and tanks, armored cars, APC's and heavy earthmoving equipment, randomly parked fighters and supersonic aircraft, randomly parked bombers and subsonic medium and heavy bombers. Differences are noted. It is found also that thermal radiation effects require clarification, and another category is suggested for describing effects on personnel.

ADNO: C001653L
AUTH: SHNIDER R.W.

CLSS: C
CONN: DAAD 05 73 C 0550
CORP: URS RESEARCH CO. (SAN MATEO, CA.)
DATE: 7501
DESC: COMPARES EM-1 DIA HANDBOOK AND ACN 4260
DESC: Nuclear Weapon Effects land transport armored vehicles L1
DESC: Nuclear Weapon Effects Communications Systems C4 hardware hardware
L1
DESC: Nuclear Weapon Effects flight systems airplanes structures L1 PARKED
AIRCRAFT
DESC: Nuclear Weapon Effects land transport unhardened vehicles L1
INCLUDING CONSTRUCTION EQUIPMENT
DESC: Nuclear Weapon Effects ordnance hardware artillery pieces guns
rocket launchers L1 ARTILLERY
EFFT: THERMAL ; AIR-BLAST
REPN: BRL CR 204 ; URS 7339 5
SUJO: 3-111-100 ; 3-131-000 ; 3-151-000 ; 3-152-000 ; 3-169-000
TEMP: A9333
TITL: PREDICTIONS OF RANGES OF BLAST DAMAGE TO MILITARY EQUIPMENT AND
THERMAL RADIATION EFFECTS ON PERSONNEL DUE TO EXPLOSIONS OF NUCLEAR
WEAPONS (U), 52 P., (C)

.block

21646

.endblock

.block

copy: 1 id: 54361-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21647
ADNO: B 000161L
CLSS: U
CORP: ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER (CHARLOTTESVILLE, VA.)
DATE: 7409
DESC: Shielding Protection L5 MULTI-PURPOSE SHIELD
LA: W. GERMANY
REPN: HSTC HT 23 1149 73
SUJO: 9-800-000
TITL: THIN WALLED ARMOR PROTECTING AGAINST RADIATION (U), 2 P., (U)

.block

21647

.endblock

.block

copy: 1 id: 54362-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21651
AUTH: ARCHER D. ; ULWICK J.C. ; SEARS R.D.
CLSS: U
CCDE: OPTIR ; OPTAUR
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.) ; AIR FORCE CAMBRIDGE

RESEARCH LABS. (BEDFORD, MA.) ; LOCKHEED PALO ALTO RESEARCH LAB.
(PALO ALTO, CA.)

DATE: 7400
DESC: EXPERIMENTAL TABULAR
DESC: test instruments EM propagation atmospheric chemistry L5
DESC: test instruments visible L5
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L5
DESC: Test execution reports program documents other Quick Look Reports L1
BB-A18.205-1 ENERGY SPECTRUM ELECTRON DENSITIES COLUMN EMISSION VS
ALTITUDE PHOTOMETER DATA RADIOMETER DATA ALL SKY CAMERA PHOTOS
SCINTILLATORS ION-ELECTRON PRODUCTION RATES GROUND BASED PHOTOMETER
DATA 3-BEAM PHOTOMETER DATA
DESC: test instruments IR L5
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
SOCE: ICECAP 73/74
SUJO: 4-320-000 ; 4-382-000 ; 4-383-000 ; 4-820-000 ; 4-820-600 ;
4-860-000 ; 5-738-000
TITL: ICECAP '73 AND '74 DATA (U), CA. 50 P., (U)

.block

21651

.endblock

.block

copy: 1 id: 54364-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21653
AUTH: HANSEN D.F.
CLSS: U
CONN: SC 74 009
CORP: HSS, INC. (BEDFORD, MA.)
DATE: 7411
DESC: EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments IR L1
DESC: test instruments visible L1
REPN: HSS B013
SUJO: 4-382-000 ; 4-383-000 ; 4-820-600
TITL: PROJECT PRECEDE; A QUICK-LOOK REPORT ON IMAGE-INTENSIFIED
SPECTROGRAPH MEASUREMENTS (U), 18 P., (U)

.block

21653

.endblock

.block

copy: 1 id: 54365-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21655
CLSS: U
CONN: DNA 001 72 C 0193
CORP: HONEYWELL RADIATION CENTER (LEXINGTON, MA.)
DATE: 7402
DESC: EXPERIMENTAL TABULAR
DESC: Test execution reports program documents other Quick Look Reports L1
HIGH RESOLUTION INTERFEROMETER SPECTROMETER BLACK BRANT A18.116-1
PHOTOMETER DATA INTERFEROGRAMS
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: test instruments visible L1
DESC: test instruments IR L1
REPN: HRC 74 2
SOCE: ICECAP 74
SUJO: 4-382-000 ; 4-383-000 ; 4-860-000 ; 5-738-000
TITL: HIRIS 72 HOUR FLIGHT REPORT (U), CA. 50 P., (U)

.block

21655

.endblock

.block

copy: 1 id: 54367-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21656
CLSS: U
CORP: SPACE DATA CORP. (PHOENIX, AZ.)
DATE: 7404
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs L1
DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L1
REPN: SDC TM 787
SUJO: 4-800-000 ; 4-820-600 ; 4-820-900
TITL: ICECAP '74B FIELD REQUIREMENTS (U), 30 P., (U)

.block

21656

.endblock

.block

copy: 1 id: 54368-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21657
CLSS: U
CORP: SPACE DATA CORP. (PHOENIX, AZ.)

DATE: 7312
DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L1
DESC: EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L1
REPN: SDC TM 718A
SUJO: 4-820-000 ; 4-820-600 ; 4-820-900
TITL: ICECAP 74A FIELD REQUIREMENTS AND PROCEDURES (U), CA. 100 P., (U)

.block

21657

.endblock

.block

copy: 1 id: 54369-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21676
AUTH: FEDDER J.A.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7401
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: THEORY
REPN: NRL MR 2691
SUJO: 5-738-000 ; 5-800-000
TITL: IONOSPHERIC MODEL FOR CURRENTS, THE ELECTRIC FIELD, AND THE PLASMA
DENSITY IN AN AURORAL ARC (U), 30 P., (U)

.block

21676

.endblock

.block

copy: 1 id: 54382-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21678
AUTH: ALLEN E.F. JR.
CLSS: U
CONN: DNA /01 73 C 0100
CORP: SPACE DATA CORP. (PHOENIX, AZ.)
DATE: 7304
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L1

DESC: EXPERIMENTAL SUMMARY
DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L1

REPN: SDC TM 671
SUJO: 4-820-000 ; 4-820-600 ; 4-820-900
TITL: ICECAP '73A FINAL REPORT (DRAFT) (U), 79 P., (U)

.block

21678

.endblock

.block

copy: 1 id: 54384-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21687
AUTH: HUPPI R.J. ; BAKER D.J.
CLSS: U
CONN: F 19628 73 C 0302
CORP: UTAH STATE UNIVERSITY (LOGAN, UT.)
DATE: 7411
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Emission Spectra of the Atmosphere L1
DESC: test instruments IR L1
DESC: HAES SIMULATION ICECAP ; EXPERIMENTAL
REPN: AFCRL TR 74 0605
SUJO: 4-383-000 ; 4-820-600 ; 5-600-000
TITL: NATURAL AND INDUCED INFRARED MEASUREMENTS (U), 37 P., (U)

.block

21687

.endblock

.block

copy: 1 id: 54390-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21719
ADNO: B000299L
CLSS: U
CONN: DAAJ 02 73 C 0032
CORP: ROCKWELL INTERNATIONAL CORP. (LOS ANGELES, CA.)
DATE: 7408
DESC: Nuclear Weapon Effects flight systems airplanes L1
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: Shielding Protection L1
DESC: THEORY TABULAR HANDBOOK
DESC: Nuclear Weapon Effects on animals thermal L1
DESC: Nuclear Weapon Effects flight systems helicopters L1
EFFT: EMP ; TREE ; THERMAL ; AIR-BLAST
EMPF: 400 ; 375
REPN: AMRDL TR 74 48A
SUJO: 3-111-000 ; 3-118-000 ; 3-312-100 ; 3-313-000 ; 9-800-000

TITLE: SURVIVABILITY DESIGN GUIDE FOR U.S. ARMY AIRCRAFT NUCLEAR HARDENING;
VOL. 1 (U), 754 P., (U)

.block

21719

.endblock

.block

copy: 1 id: 54434-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21725

AUTH: LIMBERG W.

CLSS: U

CORP: ERNST MACH INSTITUTE

DATE: 7408

DESC: EXPERIMENTAL

DESC: test instruments nuclear radiation beta electron beams L1

REPN: BERICHT 4/74

SUJO: 4-344-000

TITLE: MAGNETICAL ENERGY ANALYZER FOR SLOW ELECTRONS (U), 50 P., (U)

.block

21725

.endblock

.block

copy: 1 id: 54437-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21786-151

AUTH: BIRNBAUM M.R. ; DEAN D.K. ; CUPPS F.J.

CLSS: SRD

CCDE: WONDY ; DEPROSS

CORP: SANDIA LABS.

DATE: 7409

DESC: SIMULATION (E BEAM) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects reentry systems RV structures L1 DISC

DESC: Nuclear Weapon Effects materials metals alloys L1

DESC: Nuclear Weapon Effects reentry systems RV materials plastics L1

STEEL DISC

EFFT: X-RAY

SUJO: 3-113-100 ; 3-113-240 ; 3-243-000

SYMJ: TRANSACTIONS OF THE SEPTEMBER 10-14, 1973 MEETING OF THE US/UK JOINT
WORKING GROUP 6 (AVIS 903); VOL. 2

TITLE: DYNAMIC CURLING OF THIN DISCS SUBJECTED TO MULTIPLE RADIATION
EXPOSURES (U), 9 P., (SRD)

.block

21786-151

.endblock

.block

copy: 1 id: 54481-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21786-304
AUTH: PERKIN J.L.
CLSS: SRD
CORP: ATOMIC WEAPONS RESEARCH ESTABLISHMENT
DATE: 7409
DESC: EXPERIMENTAL
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
SUJO: 3-616-750
SYMJ: TRANSACTIONS OF THE SEPTEMBER 10-14, 1973 MEETING OF THE US/UK JOINT
WORKING GROUP 6 (AVIS 903); VOL. 2
TITL: USE OF LASERS AS SIMULATORS (U), 4 P., (SRD)

.block

21786-304

.endblock

.block

copy: 1 id: 54497-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21793
AUTH: LEOPARD F.O. ; MCSWAIN J.M.
CLSS: SRD CNWDI
CCDE: CAVEAT (RAD TRANSPORT)
CONN: DAHC 60 73 C 0012
CORP: TELEDYNE BROWN ENGINEERING (HUNTSVILLE, AL)
DATE: 7504
DESC: Radiation Transport gamma L1
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1 CABLE
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Environment Initial Gamma energy spectrum L5 P 5-4
4-1
DESC: Nuclear Weapon Environment Initial Gamma dose rate pulse width L1 P
5-5+
EFFT: IEMP
EMPF: 388
REPN: SEA75 SD 0257
TSHO: UG-CONTAINED
SUJO: 1-720-000 ; 1-740-000 ; 3-231-000 ; 9-620-000
SYST: SAFEGUARD COMMUNICATIONS
TEMP: A9422
TITL: RADIATION TRANSPORT CALCULATIONS FOR SITE DEFENSE CABLE EXPERIMENT
(U), CA. 50 P., (SRD CNWDI)
TREE: 390

.block

21793

.endblock

.block

copy: 1 id: 54498-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21807
AUTH: POWELL R.J.
CLSS: U
CONN: F 19628 74 C 0132
CORP: RCA LABS. (PRINCETON, N.J.)
DATE: 7501
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: THEORY
EFFT: TREE
REPN: AFCRL TR 75 0094 ; PRRL 75 CR 7
SUJO: 3-222-000
TITL: RADIATION AND CHARGE INJECTION IN AI203 USING NEW TECHNIQUES (U), 49
P., (U)
TREE: 200

.block

21807

.endblock

.block

copy: 1 id: 54504-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21811
AUTH: KJAR R.A. ; KUHLMANN G.J.
CLSS: U
CONN: N 00014 74 C 0416
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA.)
DATE: 7504
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: C74 454/501
SUJO: 3-222-000
TITL: RADIATION RESISTANT CMOS/SOS CIRCUITRY (U), 59 P., (U)
TREE: 325 ; 430

.block

21811

.endblock

.block

copy: 1 id: 54506-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21818
ADNO: C 001318
AUTH: WHITE M.E. ; HALLIDAY I.G.
CLSS: S
CORP: AIR FORCE, ELECTRONICS SYSTEMS DIVISION (BEDFORD, MA.)
DATE: 7503
DESC: THEORY TABULAR

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic L1
 DESC: Nuclear Weapon Effects flight systems airplanes crew L1
 DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1
 REPN: ESD TR 75 63
 SUJO: 2-223-410 ; 3-111-500 ; 3-312-200
 TEMP: A9514
 TITL: ASSESSMENT OF RADIATION HAZARD TO AABNCP (U), 54 P., (S)

.block

21818

.endblock

.block

copy: 1 id: 54509-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21821
 AUTH: ROTHSTEIN M.S.
 CLSS: U
 CORP: HARRY DIAMOND LABS. (WASH., DC)
 DATE: 7312
 DESC: Nuclear Weapon Effects land transport armored vehicles L1
 DESC: SIMULATION (PULSE REACTOR) ; EXPERIMENTAL
 DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
 EFFT: TREE
 REPN: HDL TM 73 34
 SUJO: 3-151-000 ; 3-222-000
 TITL: RADIATION EVALUATION OF LEOPARD II TANK COMPONENT VARIABLE AND FIXED
 FREQUENCY DIVIDERS (U), 22 P., (U)

TREE: 399

.block

21821

.endblock

.block

copy: 1 id: 54510-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21833
 ADNO: B 000926L
 AUTH: SACCENTI J.C.
 CLSS: U
 CCDE: MORSE (PHOTON TRANSPORT) ; ATR
 CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
 DATE: 7412
 DESC: TABULAR
 DESC: Radiation Transport gamma L1
 REPN: BRL MR 2422
 SUJO: 9-620-000
 TITL: COMPARISON OF PROMPT PHOTON MONTE CARLO TRANSPORT RESULTS WITH ATR
 CODE PREDICTIONS; 4 AND 8 KILOMETRE SOURCE ALTITUDES (U), 12 P., (U)

TREE: 960

.block

21833

.endblock

.block

copy: 1 id: 54520-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21836

ADNO: B 001107L

AUTH: WOOLSON W.A. ; HUFFMAN D.L. ; SCOTT W.H. JR. ; COLEMAN W.A.

CLSS: U

CCDE: DART (GAMMA ; X-RAY TRANSPORT) SAI

CONN: DAAD 05 73 C 0154

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)

DATE: 7412

DESC: Radiation Transport x-ray L1

DESC: Radiation Transport gamma L1

DESC: THEORY TABULAR CODE

REPN: BRL CR 198

SUJO: 9-620-000 ; 9-640-000

TITL: DART; A MONTE CARLO CODE FOR ATMOSPHERIC TRANSPORT OF X-RAYS AND
GAMMA-RAYS (U), 131 P., (U)

TREE: 960 ; 980

.block

21836

.endblock

.block

copy: 1 id: 54523-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21838

ADNO: 779941

AUTH: FREDRICKSON F.N.

CLSS: U

CCDE: ZZ (NEUTRON TRANSPORT) AFIT

CORP: AIR FORCE INSTITUTE OF TECHNOLOGY (WRIGHT-PATTERSON AFB, OH.)

DATE: 7403

DESC: Radiation Transport neutron L1

DESC: THEORY TABULAR CODE

REPN: GNE/PH 74 5

TSHO: LOW-ALT

SUJO: 9-650-000

TITL: EFFECT OF AN AIR/GROUND INTERFACE ON FLUENCE FROM A PLANE SOURCE OF
NEUTRONS IN HOMOGENEOUS AIR (U), 69 P., (U)

TREE: 970

.block

21838

.endblock

.block

copy: 1 id: 54525-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21878
AUTH: WALL J.A. ; BURKE E.A.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA.)
DATE: 7412
DESC: SIMULATION (CO-60) ; EXPERIMENTAL
DESC: test instruments nuclear radiation dosimeters radiacs L1
REPN: AFCRL TR 75 0004 ; PSRP 620
SUJO: 4-346-000
TITL: DOSE DISTRIBUTIONS AT AND NEAR THE INTERFACE OF DIFFERENT MATERIALS
EXPOSED TO COBALT-60 GAMMA RADIATION (U), 48 P., (U)
TREE: 655

.block
21878
.endblock
.block

copy: 1 id: 54545-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21880
AUTH: HOWLETT L.C. ; BELL R.J.
CLSS: U
CONN: F 19628 74 C 0130
CORP: UTAH STATE UNIVERSITY (LOGAN, UT)
DATE: 7501
DESC: test instruments IR L5
DESC: test instruments EM propagation atmospheric chemistry direct probes
L5
DESC: test instruments visible L5
DESC: test instruments EM propagation atmospheric chemistry L5
DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L1
DESC: test instruments electronic vulnerability EMP L1
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: HAES ICECAP ; EXPERIMENTAL TABULAR
REPN: AFCRL TR 75 0023
SUJO: 4-320-000 ; 4-327-000 ; 4-371-000 ; 4-382-000 ; 4-383-000 ;
4-820-600 ; 4-820-900 ; 4-823-000
TITL: ROCKETBORNE INSTRUMENTATION FOR THE MEASUREMENT OF ELECTRIC FIELDS
-PAIUTE-TOMAHAWK 10.312-3 (U), 100 P., (U)

.block
21880
.endblock
.block

copy: 1 id: 54546-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21884
ADNO: 779943
AUTH: VONDERSAAR F.J.
CLSS: U
CCDE: ZZ (HEAT CONDUCTION) AFIT
CORP: AIR FORCE INSTITUTE OF TECHNOLOGY (WRIGHT-PATTERSON AFB, OH.)
DATE: 7403
DESC: Nuclear Weapon Effects flight systems airplanes crew L1
DESC: thermal protection L1
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects on animals thermal L1
REPN: GNE/PH/74 9
SUJO: 3-111-500 ; 3-313-000 ; 9-870-000
TITL: MATERIAL SELECTION AND TESTING FOR THERMAL RADIATION SHIELDING (U),
79 P., (U)

.block

21884

.endblock

.block

copy: 1 id: 54550-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21890
CLSS: U
CONN: DNA 001 73 C 155
CORP: HOLMES AND NARVER, INC. (ANAHEIM, CA.)
DATE: 7504
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1
DESC: Nuclear Weapon Environment fallout intensity contours patterns L1
DESC: Environmental Impact Assessments EIS Supporting Data L1
DESC: EXPERIMENTAL SURVEY
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic uptake
L1
SUJO: 2-225-100 ; 3-312-220 ; 3-332-220 ; 4-870-000
TITL: CLEANUP, REHABILITATION, RESETTLEMENT OF ENEWETAK ATOLL -MARSHALL
ISLANDS, VOL. 2 (U), CA. 300 P., (U)

.block

21890

.endblock

.block

copy: 1 id: 54555-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21891
CLSS: U
CONN: DNA 001 73 C 155

CORP: HOLMES AND NARVER, INC. (ANAHEIM, CA.)
DATE: 7504
DESC: SUMMARY
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1
DESC: Environmental Impact Assessments EIS Supporting Data L1
SUJO: 3-312-220 ; 4-870-000
TTTL: CLEANUP, REHABILITATION, RESETTLEMENT OF ENEWETAK ATOLL -MARSHALL
ISLANDS, VOL. 2A (U), CA. 200 P., (U)

.block

21891

.endblock

.block

copy: 1 id: 54556-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21893
CLSS: U
CONN: DNA 001 73 C 155
CORP: HOLMES AND NARVER, INC. (ANAHEIM, CA.)
DATE: 7504
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1
DESC: Environmental Impact Assessments EIS Supporting Data L1
DESC: SURVEY
SUJO: 3-312-220 ; 4-870-000
TTTL: CLEANUP, REHABILITATION, RESETTLEMENT OF ENEWETAK ATOLL -MARSHALL
ISLANDS, VOL. 4 (U), CA. 200 P., (U)

.block

21893

.endblock

.block

copy: 1 id: 54558-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21901
AUTH: NELSON C.W. ; BARROWS A.W.
CLSS: U
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7504
DESC: Nuclear Weapon Effects ordnance propellants solid L1
DESC: SIMULATION (PULSE REACTOR) ; EXPERIMENTAL
EFFT: TREE
REPN: BRL MR 2475
SUJO: 3-164-000
TTTL: SHORT LIVED BURN RATE CHANGES IN NEUTRON RADIATION EXPERIMENTS (U),
28 P., (U)

.block

21901

.endblock

.block

copy: 1 id: 54560-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21902
ADNO: 528432L
AUTH: BECHTOLD G.W.
CLSS: S
CORP: NAVAL ORDNANCE LAB. (SILVER SPRING, MD.)
DATE: 7305
DESC: SIMULATION (EMPRESS) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects ordnance electroexplosive devices fuses L1
EFFT: EMP
EMPF: 345
REPN: NOLTR 73 122
SUJO: 3-162-000
TEMP: A9447
TITL: INVESTIGATION OF ELECTROMAGNETIC PULSE (EMP) RADIATION EFFECTS ON
ELECTROEXPLOSIVE DEVICES (U), 26 P., (S)

.block

21902

.endblock

.block

copy: 1 id: 54561-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21910
AUTH: KAZI A.H.
CLSS: U
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD.)
DATE: 7412
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1
DESC: EXPERIMENTAL
REPN: BRL 1751
SUJO: 4-241-000
TITL: OPERATION OF 106MM DIAMETER HIGH-FLUX IRRADIATION CAVITY AT THE ARMY
PULSE RADIATION FACILITY (U), 59 P., (U)
TREE: 642

.block

21910

.endblock

.block

copy: 1 id: 54566-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 21911
AUTH: MAIER R.J.

CLSS: U
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7502
DESC: THEORY
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: TREE
REPN: AFWL TR 74 266
SUJO: 3-221-000
TITL: MODEL FOR THE DISCHARGE OF RADIATION-INDUCED SPACE CHARGE IN
MOSFET'S (U), 24 P., (U)
TREE: 325 ; 250

.block
21911
.endblock
.block

copy: 1 id: 54567-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21917
AUTH: SROUR J.R. ; CURTIS O.L. ; OTHMER S. ; CHIU K.Y.
CLSS: U
CONN: DAAG 39 73 C 0171
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA.)
DATE: 7505
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
MOS CAPACITORS
DESC: SIMULATION (CO 60 FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 GA A SI O2 FILMS
EFFT: TREE
REPN: HDL CR 75 171 1 ; NRTC 75 5R
SUJO: 3-220-200 ; 3-221-000 ; 3-222-000
TITL: RADIATION EFFECTS ON OXIDES, SEMICONDUCTORS, AND DEVICES (U), 205
P., (U)
TREE: 200 ; 310 ; 325

.block
21917
.endblock
.block

copy: 1 id: 54570-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21927
AUTH: BRUNCKE W.C. ; CRABBE J.S. ; HOPKINS G.G. ; LIPMAN J.A. ; MANUS D.J.
; MATZEN W.T.
CLSS: U
CONN: N 00164 73 C 0420

CORP: TEXAS INSTRUMENTS, INC. (DALLAS, TX.)
DATE: 7411
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTOR DIODE TETRODE
DESC: SIMULATION (SEM CO 60) ; EXPERIMENTAL
EFFT: TREE
REPN: NAD CRANE TR 7024 C74 121 ; 03 74 33
SUJO: 3-221-000
TITL: STUDY OF THE CORRELATION BETWEEN BIPOLAR TRANSISTOR OXIDE
CHARACTERISTICS AND THE PARAMETER SHIFTS IN THESE DEVICES DUE TO
IONIZING RADIATION (U), 64 P., (U)
TREE: 649 ; 310

.block
21927
.endblock
.block

copy: 1 id: 54577-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21928
AUTH: LEE F.
CLSS: U
CONN: N 00014 74 C 0451
CORP: RCA SOLID STATE TECHNOLOGY CENTER (SOMERVILLE, NJ)
DATE: 7505
DESC: SIMULATION (SEM CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DIFFERENTIAL AMPLIFIER MOS CAPACITORS
EFFT: TREE
REPN: PRRL 75 CR 10
SUJO: 3-222-000
TITL: IMPROVED RADIATION HARDNESS OF BIPOLAR LINEAR CIRCUITS (U), 68 P.,
(U)
TREE: 325

.block
21928
.endblock
.block

copy: 1 id: 54578-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21929
ADNO: C002117L
AUTH: GREGORY F.H.
CLSS: SRD CNWDI
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)
DATE: 7505
DESC: Nuclear Weapon Environment X-ray Output energy spectrum L1
DESC: Nuclear Weapon Environment X-ray Output source strength total
intensity L1

DESC: Nuclear Weapon Environment X-ray Output rate L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Effects reentry systems RV structures L1
EFFT: X-RAY
REPN: BRL 1787
SOCE: SPARTAN [REDACTED]
SUJO: 1-610-000 ; 1-620-000 ; 1-640-000 ; 3-113-100
TEMP: A9494
TITL: RADIATION SPECTRA, TRANSPORT AND DEPOSITION FOR INTEGRATED EFFECTS
STUDIES (U), 57 P., (SRD CNWDI)
TREE: 930

.block
21929
.endblock
.block

copy: 1 id: 54579-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21931
CLSS: U
CORP: ENVIRONMENTAL PROTECTION AGENCY (WASH, DC)
DATE: 7505
DESC: Nuclear Energy Power Nuclear Materials Facilities security safety
handling transport safeguards L1
DESC: SUMMARY
DESC: Environmental Impact Assessments EIS Supporting Data L1
SUJO: 3-520-000 ; 4-870-130
TITL: ENVIRONMENTAL RADIATION PROTECTION REQUIREMENTS FOR NORMAL
OPERATIONS OF ACTIVITIES IN THE URANIUM FUEL CYCLE (U), 143 P., (U)

.block
21931
.endblock
.block

copy: 1 id: 54580-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 21961
AUTH: KNOX J.B. ; WILLIAMS A.L. ; ORPAHN R.C. ; MOLENKAMP C.R. ; LANGE R.
; JANKUS E.V. ; HARVEY T.F. ; GUDIENSEN P.H. ; FULK M.M. ; DUEWER
W.H.

CLSS: SRD
CCDE: ADPIC (LLL ; ATMOSPHERIC CLOUD TRANSPORT)
CONN: W 7405 ENG 48
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7408
DESC: Nuclear Weapon Environment Fallout Particles size distribution L1
DESC: test instruments nuclear radiation fallout debris sampling
collectors L1
DESC: SORA ; SUMMARY
DESC: Nuclear weapon basic design L5

DESC: Nuclear Weapon Environment fallout transport L1
DESC: Nuclear Weapon Environment Fallout isotope concentrations L1
DESC: Nuclear Weapon Environment fallout transfer L1
REPN: UCRL 51625
TSHO: LOW-ALT ; HI-ALT
SUJO: 2-222-300 ; 2-223-100 ; 2-224-200 ; 2-224-300 ; 4-345-000 ;
4-831-000
TEMP: A9105 ; A9133
TITL: PROGRESS IN RAINOUT RESEARCH AT LAWRENCE LIVERMORE LABORATORY;
FISCAL YEAR 1974 (U), 76 P., (SRD)

.block
21961
.endblock

.block
copy: 1 id: 54599-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22107
AUTH: REAGAN J.B.
CLSS: U
CONN: N 00014 70 C 0203
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7505
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1 PARTICLES
DESC: EXPERIMENTAL
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: ionospheric properties during storms disturbances L1
REPN: LMSC/D454290
SUJO: 5-400-000 ; 5-720-000 ; 5-800-000
TITL: STUDY OF THE D-REGION IONOSPHERE DURING THE INTENSE SOLAR PARTICLE
EVENTS OF AUGUST 1972 (U), 102 P., (U)

.block
22107
.endblock

.block
copy: 1 id: 54628-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22172
AUTH: LESSLER R.M. ; ALLEY W.E. ; GREEN J.B.
CLSS: U
CCDE: ACT (NEUTRON INDUCED SOIL RADIOACTIVITY ; LLL) ; ACTIVE (NEUTRON
INDUCED SOIL RADIOACTING ; LLL)
CONN: W 7405 ENG 48
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA)
DATE: 7304
DESC: CODE
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L1
DESC: Nuclear Weapon Environment radiation decay L1

DESC: Radiation Transport neutron L1
REPN: UCRL 51292
SUJO: 2-223-200 ; 2-223-400 ; 9-650-000
TITL: ACT AND ACTIVE CODES FOR CALCULATING NEUTRON-INDUCED ACTIVATION (U),
15 P., (U)

.block

22172

.endblock

.block

copy: 1 id: 54670-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22175
ADNO: B 001840L
AUTH: ORNDORFF R.M. ; KRAMER G.M.
CLSS: U
CONN: F 33615 73 C 1284
CORP: HUGHES AIRCRAFT CO. (CULVER CITY, CA)
DATE: 7410
DESC: SUMMARY
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFAL TR 74 263
SUJO: 3-222-000
TITL: RADIATION HARDENED VOLTAGE REGULATOR (U), 24 P., (U)
TREE: 430

.block

22175

.endblock

.block

copy: 1 id: 54672-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22197
AUTH: BAUM S.J. ; EKSTROM M.E. ; SKIDMORE W.D. ; WYANT D.E. ; ATKINSON
J.L.

CLSS: U

CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (BETHESDA, MD)

DATE: 7504

DESC: SIMULATION (PULSER) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects on plants RF microwave L1

EMPF: 500

REPN: AFRRRI SR75 11

SUJO: 3-334-000

TITL: BIOLOGICAL MEASUREMENTS IN RODENTS EXPOSED CONTINUOUSLY THROUGHOUT
THEIR ADULT LIFE TO PULSED ELECTROMAGNETIC RADIATION (U), 17 P., (U)

.block

22197

.endblock

.block

copy: 1 id: 54684-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22241
AUTH: ZINN J. ; KODIS J.W. ; SUTHERLAND C.D.
CLSS: SFRD
CCDE: RADFLO
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM)
DATE: 7405
DESC: SURVEY
DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
OPACITY FOR RADFLO CALCULATIONS
DESC: Nuclear weapon test yield L1 TIGHTROPE REVISION ALSO FOR SEVERAL
FRENCH ON GRAPH ON P. 10
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1 TEMPERATURES ELECTRON DENSITIES LOW
ALT
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
SCALING LAWS
DESC: Nuclear Weapon Environment Visible Output rate L1 IN BLUE FOR
SEVERAL SHOTS SCALING LAWS
REPN: LA 5591 SR
SHOT: BLUEGILL ; TIGHTROPE ; YUCCA ; HA ; ORANGE ; FRENCH (73-07-21) ;
FRENCH 31-35 ; FRENCH (70-08-02) ; FRENCH (70-08-06) ; FRENCH
(71-06-12) ; FRENCH (71-07-04) ; FRENCH (72-06-25) ; FRENCH
(72-06-30) ; FRENCH (72-07-27) ; FRENCH (73-07-21)
TSHO: LOW-ALT ; HI-ALT
SUJO: 1-440-000 ; 2-110-000 ; 2-130-000 ; 4-835-000 ; 5-200-000
TEMP: A8279 ; C5289
TITL: STATUS REPORT ON FIREBALL RADIATION-HYDRODYNAMICS COMPUTATIONS (U),
21 P., (SFRD)

.block
22241
.endblock
.block

copy: 1 id: 54718-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22270
AUTH: AUBUCHON K.G. ; HARARI E. ; CHANG P.
CLSS: U
CONN: N 00014 72 C 0424
CORP: HUGHES AIRCRAFT CO. (NEWPORT BEACH, CA)
DATE: 7410
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: EXPERIMENTAL
EFFT: TREE
REPN: P75 116
SUJO: 3-222-000

TITL: CMOS RADIATION HARDENING (U), 114 P., (U)

TREE: 325 ; 430

.block

22270

.endblock

.block

copy: 1 id: 54738-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22307

AUTH: GURTMAN G.A. ; RICE M.H. ; CECIL R.A. ; SIMS E.W.

CLSS: U

CONN: F 29601 73 C 0074

CORP: SYSTEMS, SCIENCE AND SOFTWARE (LA JOLLA, CA)

DATE: 7504

DESC: THEORY TABULAR

DESC: Nuclear Weapon Effects reentry systems RV materials heatshield L1

EFFT: X-RAY

REPN: AFWL TR 74 144 ; SSS R 74 2210

SUJO: 3-113-220

TITL: MATERIAL RESPONSE MODELS FOR RADIATION EFFECTS ON ADVANCED
THREE-DIMENSIONAL, COMPOSITE HEATSHIELD MATERIALS (U), 312 P., (U)

.block

22307

.endblock

.block

copy: 1 id: 54788-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22319

ABS: DELFIC (Department of Defense land fallout interpretive code) has
been adapted to predict downwind fallout deposition from high
explosive yields as low as 10 pounds. This capability will be useful
in predicting the consequences of one-point non-nuclear accidental
detonations of nuclear devices where the fallout includes toxic
radioactive component materials.

AUTH: KLEMM J. ; MALONEY J.C.

CLSS: U

CCDE: DELFIC (FALLOUT ; RADIOLOGICAL WEAPON SAFETY) BRL

CORP: ARMY BALLISTIC RESEARCH LAB. (ABERDEEN PROVING GROUND, MD)

DATE: 7503

DESC: Nuclear weapon safety radiological L1

DESC: CODE

REPN: BRL MR 2542

SUJO: 4-838-100

TITL: DEPARTMENT OF DEFENSE LAND FALLOUT PREDICTION SYSTEM; ADAPTION FOR
EXTREMELY LOW-YIELD DETONATIONS (U), 51 P., (U)

TNFF: 8859

.block

22319

.endblock

.block

copy: 1 id: 54794-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22330
AUTH: PACE J.V. III ; BARTINE D.E. ; MYNATT F.R.
CLSS: U
CCDE: DOT-III [REDACTED] ORNL
CONN: W 740T ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7508
DESC: Radiation Transport neutron L1 970 960
DESC: Nuclear Weapon Environment Prompt Neutron source strength total
fluence L1
DESC: TABULAR
REPN: ORNL TM 4841
TSHO: LOW-ALT
SUJO: 1-110-000 ; 9-650-000
TTTL: NEUTRON AND SECONDARY-GAMMA-RAY TRANSPORT CALCULATIONS FOR 14-MEV
AND FISSION NEUTRON SOURCES IN AIR-OVER-GROUND AND AIR-OVER-SEAWATER
GEOMETRIES (U), 42 P., (U)
TREE: 970

.block

22330

.endblock

.block

copy: 1 id: 54807-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22331
AUTH: WEISBIN C.R. ; OBLOW E.M. ; CHING J. ; WHITE J.E. ; WRIGHT R.Q. ;
DRISCHLER J.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7508
DESC: Cross Sections neutron L1 N O
DESC: THEORY TABULAR
DESC: Radiation Transport neutron L1
REPN: ORNL TM 4847 ; ENDF 218
SUJO: 9-650-000 ; 9-820-000
TTTL: CROSS SECTION AND METHOD UNCERTAINTIES; THE APPLICATION OF
SENSITIVITY ANALYSIS TO STUDY THEIR RELATIONSHIP IN RADIATION
TRANSPORT BENCHMARK PROBLEMS (U), 70 P., (U)
TREE: 412 ; 970

.block

22331

.endblock

.block

copy: 1 id: 54808-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22457
AUTH: PARKINSON W.W. ; KELLY M.J.
CLSS: U
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7302
DESC: Nuclear Weapon Effects electronic subsystems analysis circuit
network L5
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects materials plastics resins L5
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1
EFFT: GAMMA
REPN: ORNL 4842
SUJO: 3-219-000 ; 3-229-000 ; 3-244-000
TITL: DEVELOPMENT OF RADIATION-RESISTANT INSULATORS FINAL PROJECT REPORT
JULY 1, 1966 TO JANUARY 15, 1972 (U), 95 P., (U)
TREE: 385

.block

22457

.endblock

.block

copy: 1 id: 54979-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22615
AUTH: EASTMAN T.E. ; BROSTE W.B. ; WRIGHT D.
CLSS: U
CONN: E (29 1) 1183
CORP: EG+G, INC. (LOS ALAMOS, NM)
DATE: 7506
DESC: SIMULATION (BARIUM RELEASE) ; THEORY
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1 ION YIELDS
REPN: EGG 1183 5055
TSHO: HI-ALT
SUJO: 2-211-000
TITL: RESONANT SCATTERING OF SOLAR RADIATION BY HIGH VELOCITY BARIUM IONS
(U), 20 P., (U)

.block

22615

.endblock

.block

copy: 1 id: 55132-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22627
ADNO: A 005317
AUTH: READ F.W.
CLSS: U
CORP: ROYAL AIRCRAFT ESTABLISHMENT (FARNBOROUGH HANTS, ENGLAND)
DATE: 7411
DESC: BIBLIOGRAPHY
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic

external L9

LA: SWEDEN
SUJO: 3-312-210
TITL: SWEDISH DEFENSE RESEARCH ABSTRACTS, 73/74-2 (U), 47 P., (U)

.block

22627

.endblock

.block

copy: 1 id: 55138-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22628
AUTH: READ F.W.
CLSS: U
CORP: ROYAL AIRCRAFT ESTABLISHMENT (FARNBOROUGH HANTS, ENGLAND)
DATE: 7303
DESC: BIBLIOGRAPHY
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic

internal L5

LA: SWEDEN
SUJO: 3-312-220
TITL: SWEDISH DEFENSE RESEARCH ABSTRACTS, 71/71-4 (U), 31 P., (U)

.block

22628

.endblock

.block

copy: 1 id: 55139-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22629
AUTH: READ F.W.
CLSS: U
CORP: ROYAL AIRCRAFT ESTABLISHMENT (FARNBOROUGH HANTS, ENGLAND)
DATE: 7308
DESC: BIBLIOGRAPHY
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic

external L5

LA: SWEDEN
SUJO: 3-312-210
TITL: SWEDISH DEFENSE RESEARCH ABSTRACTS 72/73-2 (U), 43 P., (U)

.block

22629

.endblock

.block

copy: 1 id: 55140-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22630

AUTH: READ F.W.

CLSS: U

CORP: ROYAL AIRCRAFT ESTABLISHMENT (FARNBOROUGH HANTS, ENGLAND)

DATE: 7303

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic

internal L5

DESC: BIBLIOGRAPHY

DESC: Nuclear Weapon Environment fallout intensity contours patterns L5

LA: SWEDEN

SUJO: 2-225-100 ; 3-312-220

TITL: SWEDISH DEFENSE RESEARCH ABSTRACTS, 72/73-1 (U), 50 P., (U)

.block

22630

.endblock

.block

copy: 1 id: 55141-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22654

AUTH: HAMPEL D. ; PROST K.J.

CLSS: U

CONN: DAAG 39 73 C 0254

CORP: RADIO CORPORATION OF AMERICA (SOMERVILLE, NJ)

DATE: 7501

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: EXPERIMENTAL

EFFT: TREE

EMPF: 420

SUJO: 3-222-000

TITL: NUCLEAR RADIATION TESTS ON EMP HARDENED CMOS CIRCUITS (U), 24 P.,

(U)

TREE: 325

.block

22654

.endblock

.block

copy: 1 id: 55161-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22655

AUTH: SAH C.T. ; SAH L.C.

CLSS: U

CONN: MIPR 74 579 ; DAAG 39 75 C 0013
CORP: C.T. SAH ASSOCIATES (URBANA, IL)
DATE: 7504
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: TREE
REPN: HDL CR 75 013 1 ; SAHAS 75 1
SUJO: 3-221-000
TTTL: EFFECTS OF IONIZING RADIATION ON THE CHARACTERISTICS OF
METAL-OXIDE-SILICON STRUCTURES (U), 53 P., (U)
TREE: 325

.block

22655

.endblock

.block

copy: 1 id: 55162-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22748
AUTH: BAKER D. ; STEED A. ; HUPPI R. ; PENDLETON W. JR.
CLSS: U
CONN: F 19628 73 C 0048
CORP: UTAH STATE UNIVERSITY (LOGAN, UT)
DATE: 7501
DESC: HAES ICECAP ; EXPERIMENTAL
DESC: Emission Spectra of the Atmosphere L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
REPN: HAES 9 ; AFCRL TR 75 0010
SUJO: 4-820-600 ; 5-600-000 ; 5-738-000
TTTL: NEAR-INFRARED AURORAL SPECTRA; HAES REPORT NO. 19 (U), 44 P., (U)

.block

22748

.endblock

.block

copy: 1 id: 55248-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22755
AUTH: DUNN M.G. ; WURSTER W.H. ; TREANOR C.E.
CLSS: U
CONN: DNA 001 74 C 0220
CORP: CALSPAN CORP. (BUFFALO, NY)
DATE: 7504
DESC: HAES ; THEORY EXPERIMENTAL
DESC: test instruments IR L1

DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
REPN: WB 5487 A 1
SUJO: 4-120-000 ; 4-383-000
TTTL: RADIATION STUDIES OF METAL-OXYGEN MIXTURES; FINAL REPORT (U), 36 P.,
(U)

.block

22755

.endblock

.block

copy: 1 id: 55252-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22756
AUTH: GOLDMAN S.R. ; BAKER L. ; OSSAKOW S.L. ; SCANNAPIECO A.J.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7507
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1 STRIATIONS
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L5
DESC: HAES ; THEORY
REPN: NRL MR 3083
SUJO: 2-211-000 ; 5-800-000
TTTL: COUPLED BARIUM CLOUD-IONOSPHERE SYSTEMS; 4, STRIATION PENETRATION
INTO AN INHOMOGENEOUS IONOSPHERE (U), 98 P., (U)

.block

22756

.endblock

.block

copy: 1 id: 55253-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22877
AUTH: CRAWFORD T.V. ; PETERSON K.R. ; KNOX J.B.
CLSS: U
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA)
DATE: 7500
DESC: Nuclear Weapon Phenomenology cloud shape size L5
DESC: THEORY
DESC: Nuclear Weapon Environment Fallout isotope concentrations L1
DESC: Nuclear Weapon Environment fallout transport L1
DESC: Nuclear Weapon Environment fallout intensity contours patterns L1
LONG RANGE FALLOUT
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1 ESTIMATED DOSE VIA VARIOUS PATHWAYS
DESC: Nuclear Energy Peaceful Applications excavation L1
DESC: Nuclear Energy Peaceful Applications radiation problems L1
EFFT: GAMMA

REPN: UCRL 50936 REV. 2
TSHO: UG-VENTED
SUJO: 2-223-100 ; 2-224-140 ; 2-224-200 ; 2-225-100 ; 3-312-220 ;
3-480-400 ; 3-481-000
TTTL: PREDICTIONS OF LONG DISTANCE RADIOACTIVITY AND RADIATION DOSES TO
MAN IN 13 HYPOTHETICAL EXCAVATION APPLICATIONS (U), 50 P., (U)

.block

22877

.endblock

.block

copy: 1 id: 55447-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22882
AUTH: KNOX J.B. ; PETERSON K.R.
CLSS: U
CCDE: 2BPUFF ; ADPIC
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA)
DATE: 7501
DESC: IMPROVED CODE CALCULATIONS
DESC: Nuclear Energy Peaceful Applications radiation problems L1
DESC: Nuclear Weapon Environment fallout transport L1
DESC: Nuclear Weapon Environment fallout intensity contours patterns L1
DESC: Nuclear Weapon Environment fallout transfer L11 RAINOUT DATA POINTS
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1 DOSE FROM TRITIUM

EFFT: IONIZING RADIATION

REPN: UCRL 76318 ; CONF 750109 8

TSHO: UG-VENTED

SUJO: 2-224-200 ; 2-224-300 ; 2-225-100 ; 3-312-220 ; 3-480-400

TTTL: ESTIMATING ATMOSPHERIC TRANSPORT, DIFFUSION, AND DEPOSITION OF
RADIOACTIVITY FROM PEACEFUL NUCLEAR EXPLOSIVES; PROGRESS SINCE 1971
(U), 75 P., (U)

.block

22882

.endblock

.block

copy: 1 id: 55452-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22916
AUTH: FLANAGAN T.M. ; KALMA A.H. ; LEADON R.E. ; NABER J.A. ; SNOWDEN D.P.
; WILKENFELD J.M.

CLSS: U

CONN: DAAG 39 73 C 0197

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7503

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: HDL CR 75 197 1 ; INTEL RT 8008 007
SUJO: 3-222-000
TTTL: TRANSIENT RADIATION EFFECTS; FINAL REPORT (U), 114 P., (U)
TREE: 200 ; 325 ; 385 ; 250

.block

22916

.endblock

.block

copy: 1 id: 55470-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22930-06
AUTH: KALMA A.H.
CLSS: SRD
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7501
DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1
DESC: EXPERIMENTAL
EFFT: TREE
SUJO: 3-224-000
SYMJ: NUCLEAR HARDENED SENSOR TECHNOLOGY SYMPOSIUM PROCEEDINGS
TTTL: RADIATION DAMAGE EFFECTS IN FOCAL PLANE COMPONENTS (U), 24 P., (SRD)
TREE: 361

.block

22930-06

.endblock

.block

copy: 1 id: 55487-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22930-07
AUTH: ROTOLANTE R.A. ; WONG T.T. ; BECK J.D.
CLSS: SRD
CORP: HONEYWELL RADIATION CENTER (LEXINGTON, MA)
DATE: 7501
DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1
DESC: EXPERIMENTAL
EFFT: TREE
SUJO: 3-224-000
SYMJ: NUCLEAR HARDENED SENSOR TECHNOLOGY SYMPOSIUM PROCEEDINGS
TTTL: HARDENED (HGCD)TE INFRARED DETECTORS (U), 27 P., (SRD)
TREE: 430

.block

22930-07

.endblock

.block

copy: 1 id: 55488-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22930-14
AUTH: PASSENHEIM B.C.
CLSS: SRD
CORP: INELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7501
DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1
DESC: EXPERIMENTAL
EFFT: TREE
SUJO: 3-224-000
SYMJ: NUCLEAR HARDENED SENSOR TECHNOLOGY SYMPOSIUM PROCEEDINGS
TITL: RADIATION-INDUCED LUMINESCENCE AND ATTENUATION IN OPTICAL MATERIALS
(U), 19 P., (SRD)
TREE: 361

.block
22930-14

.endblock
.block
copy: 1 id: 55495-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22930-18
AUTH: DAUGER A.B.
CLSS: SRD
CORP: MCDONNELL-DOUGLAS ASTRONAUTICS CO. (HUNTINGTON BEACH, CA)
DATE: 7501
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L5 POST SENSOR TESTING
DESC: SUMMARY
SUJO: 4-241-000
SYMJ: NUCLEAR HARDENED SENSOR TECHNOLOGY SYMPOSIUM PROCEEDINGS
TITL: NUCLEAR HARDENED OPTICAL SENSOR TEST FACILITY (U), 16 P., (SRD)
TREE: 642

.block
22930-18

.endblock
.block
copy: 1 id: 55499-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22940
AUTH: YUCKER W.R. ; BILLINGS M.P.
CLSS: U
CORP: MCDONNELL DOUGLAS ASTRONAUTICS CO. (HUNTINGTON BEACH, CA)
DATE: 7406
DESC: test instruments biomedical simulants phantoms models L1
REPN: MDAC WD 2245

SUJO: 4-352-000
TITL: BODY MASS DISTRIBUTIONS FOR RADIATION DOSE ANALYSIS (U), 27 P., (U)

.block
22940

.endblock

.block

copy: 1 id: 55510-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22951
AUTH: MEREWETHER D.E.
CLSS: SRD
CONN: DASA 01 71 C 0105
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7308
DESC: Nuclear Weapon Effects structures hard launch sites electronics

electrical power systems L1

DESC: TABULAR
EFFT: EMP
EMPF: 395
REPN: AMRC N 10
SUJO: 3-116-300
SYST: MINUTEMAN LAUNCH FACILITY
TEMP: B0246
TITL: PREDICTIONS OF RADIATION-INDUCED EMP FIELDS WITHIN A CONCRETE
MINUTE-MAN LAUNCH SUPPORT BUILDING (U), 27 P., (SRD)

.block

22951

.endblock

.block

copy: 1 id: 55521-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22963
AUTH: BEVERLY W.B. ; NIILER A. ; BANKS N.E.
CLSS: U
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)
DATE: 7509
DESC: Cross Sections neutron L1
DESC: Radiation Transport neutron L1
DESC: THEORY
REPN: BRL R 1830
SUJO: 9-650-000 ; 9-820-000
TITL: EFFECTS OF THE EVALUATOR ASSIGNED NITROGEN NUCLEAR CROSS SECTION
UNCERTAINTIES UPON THE TRANSPORT OF NEUTRONS IN AIR (U), 107 P., (U)

TREE: 412 ; 970

.block

22963

.endblock

.block

copy: 1 id: 55530-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22974
ADNO: A008660
AUTH: JOHNSON J.D.
CLSS: U
CORP: AIR FORCE INSTITUTE OF TECHNOLOGY (WRIGHT-PATTERSON AFB, OH)
DATE: 7503
DESC: Nuclear Weapon Environment Thermal Output source strength total
intensity L1
DESC: THEORY
REPN: GNE/PH/75 7
TSHO: LOW-ALT ; HI-ALT
SUJO: 1-210-000
TITL: SENSITIVITY STUDY OF THERMAL RADIATION FLUENCE FROM A NUCLEAR AIR
BURST (U), 70 P., (U)

.block
22974
.endblock
.block

copy: 1 id: 55539-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 22983
ADNO: A011360
AUTH: MOONEY L.G. ; SWANSON R.L.
CLSS: U
CONN: DAHC 20 72 C 0123
CORP: RADIATION RESEARCH ASSOCIATES (FT. WORTH, TX)
DATE: 7407
DESC: Nuclear Weapon Environment radiation decay gamma decay L5
DESC: TABULAR
DESC: Nuclear Weapon Environment Initial Gamma source strength total
intensity L1
DESC: Nuclear Weapon Environment Prompt Neutron source strength total
fluence L1
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L5
REPN: RRA T7411
TSHO: LOW-ALT
SUJO: 1-110-000 ; 1-710-000 ; 2-110-000 ; 2-223-420
TITL: INITIAL NUCLEAR RADIATION SUPPORT STUDIES (U), 35 P., (U)
TREE: 910 ; 920

.block
22983
.endblock
.block

copy: 1 id: 55546-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22993
AUTH: BURT D.A. ; ALLRED G.D. ; KEMP J.C. ; HOWLETT L.C. ; POUND E.F. ;
LEBARON G.K.
CLSS: U
CONN: F 19628 72 C 0255
CORP: UTAH STATE UNIVERSITY (LOGAN, UT)
DATE: 7409
DESC: test instruments UV L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments EM propagation atmospheric chemistry L1
DESC: test instruments visible L1
DESC: HAES ICECAP ; EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L1
DESC: test instruments IR L1
REPN: AFCRL TR 75 0001 ; HAES 07
SUJO: 4-320-000 ; 4-381-000 ; 4-382-000 ; 4-383-000 ; 4-820-600 ;
4-820-900
TITL: ICECAP 72 -A ROCKET MEASUREMENTS PROGRAM FOR THE INVESTIGATION OF
AURORAL INFRARED EMISSIONS -BLACK BRANT 17.110-3 (U), 165 P., (U)

.block

22993

.endblock

.block

copy: 1 id: 55550-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 22996
AUTH: BLATTNER W.G.M. ; WELLS M.B.
CLSS: U
CCDE: FLASH
CONN: F 19628 74 C 0140
CORP: RADIATION RESEARCH ASSOCIATES, INC. (FT. WORTH, TX)
DATE: 7505
DESC: Emission Spectra of the Atmosphere L1
DESC: HAES ICECAP ; THEORY
REPN: RRA T7501 ; AFCRL TR 75 0317 ; HAES REPT. 26
SUJO: 5-600-000
TITL: SKY RADIANCE CALCULATIONS IN THE 0.5 UM -5.0 UM WAVELENGTH RANGE;
HAES REPORT NO. 26 (U), 191 P., (U)

.block

22996

.endblock

.block

copy: 1 id: 55553-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23001
AUTH: WYATT C.L. ; HAN R.Y. ; BAKER D.J.
CLSS: U
CONN: F 19628 72 C 0264
CORP: UTAH STATE UNIVERSITY (LOGAN, UT)
DATE: 7409
DESC: Emission Spectra of the Atmosphere L1
DESC: HAES ICECAP ; THEORY EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
REPN: AFCRL TR 75 0072 ; HAES REPT. 13
SUJO: 4-820-600 ; 5-600-000
TITL: THEORETICAL EVALUATION OF VERTICALLY VIEWING AND EARTH-LIMB SCANNING
MODES FOR ROCKETBORNE EARTH-LIMB MEASUREMENTS; HAES REPORT NO. 13
(U), 46 P., (U)

.block
23001
.endblock

.block
copy: 1 id: 55556-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23005
AUTH: KUMER J.B.
CLSS: U
CONN: F 19628 73 C 0288
CORP: LOCKHEED PALO ALTO RESEARCH LABS. (PALO ALTO, CA)
DATE: 7507
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: test instruments visible L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: HAES ICECAP
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
DESC: test instruments IR L1
REPN: AFCRL TR 74 0334 ; LMSC D403888 ; HAES REPT. 19
SUJO: 4-120-000 ; 4-382-000 ; 4-383-000 ; 4-820-600 ; 5-400-000 ;
5-738-000
TITL: ANALYSIS OF 4.3 UM ICE CAP DATA HAES REPORT NO. 19 (U), 208 P., (U)

.block
23005
.endblock

.block
copy: 1 id: 55558-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23011
ADNO: C003923L
AUTH: FOLEY H. ; BAUER E. ; LELEVIER R. ; CHAMBERLAIN J. ; PHELPS A
CLSS: SFRD
CONN: DAHC 15 73 C 0370
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA)
DATE: 7511
DESC: JASON ; SUMMARY
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Test Simulation Field Programs experiment design
high-altitude debris L1
REPN: JSR 74 4 ; SRI PROJ. 3000
SUJO: 4-820-600 ; 4-822-000 ; 4-823-000 ; 5-400-000
TEMP: B0330
TITL: JASON PANEL REPORT ON THE DNA REACTION RATE PROGRAM (U), 82 P.,
(SFRD)

.block

23011

.endblock

.block

copy: 1 id: 55564-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23054
AUTH: SCHRACK R.A. ; BOWMAN C.D.
CLSS: U
CORP: NATIONAL BUREAU OF STANDARDS (WASH., DC)
DATE: 7510
DESC: Shielding Protection L1
DESC: test instruments nuclear radiation L1
DESC: Nuclear Energy Power Nuclear Materials waste disposal L1
DESC: Nuclear RDT&E Research Program Descriptions biomedical L1
REPN: NBS SP 425 VOL. 1
SUJO: 3-530-000 ; 4-150-000 ; 4-340-000 ; 9-800-000
TITL: NUCLEAR CROSS SECTIONS AND TECHNOLOGY, PROCEEDINGS OF A CONFERENCE;
VOL. 1 (U), 487 P., (U)

TREE: 410

.block

23054

.endblock

.block

copy: 1 id: 55599-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23055
AUTH: SCHRACK R.A. ; BOWMAN C.D.

CLSS: U
CORP: NATIONAL BUREAU OF STANDARDS (WASH., DC)
DATE: 7510
DESC: Shielding Protection L1
DESC: test instruments nuclear radiation L1
DESC: Nuclear Energy Power Nuclear Materials waste disposal L1
DESC: Nuclear RDT&E Research Program Descriptions biomedical L1
REPN: NBS SP 425 VOL. 2
SUJO: 3-530-000 ; 4-150-000 ; 4-340-000 ; 9-800-000
TTTL: NUCLEAR CROSS SECTIONS AND TECHNOLOGY, PROCEEDINGS OF A CONFERENCE;
VOL. 2 (U), 553 P., (U)

TREE: 410

.block

23055

.endblock

.block

copy: 1 id: 55600-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23060

AUTH: CHING J. ; OBLOW E.M.

CLSS: U

CCDE: ANISN (N TRANSPORT) ORNL

CONN: W 7405 ENG 26

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)

DATE: 7509

DESC: TABULAR

DESC: Radiation Transport neutron L1

REPN: ORNL TM 5020

SUJO: 9-650-000

TTTL: ONE-DIMENSIONAL FAST-NEUTRON TRANSPORT BENCHMARK CALCULATIONS (U),
95 P., (U)

TREE: 970

.block

23060

.endblock

.block

copy: 1 id: 55605-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23080

AUTH: WILLIAMS R.A.

CLSS: U

CONN: F 19628 73 C 0250

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7404

DESC: SIMULATION (I EBETRON 705 E BEAM) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic piecparts magnetic devices L1

SHIFT REGISTERS

EFFT: TREE

REPN: AFCRL TR 74 0233 ; C73 1102.2/501
SUJO: 3-225-000
TITL: EFFECTS OF NUCLEAR RADIATION ON MAGNETIC BUBBLE DOMAIN MATERIALS AND
DEVICES (U), 26 P., (U)

TREE: 340

.block

23080

.endblock

.block

copy: 1 id: 55622-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23098

AUTH: WILLIAMS R.A. ; HENRY R.D. ; CHEN T.T. ; BARRY M.D.

CLSS: U

CONN: F 19628 72 C 0342

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7302

DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1 GA

--YIG GA --ER IG GA --(YG DTM) IG FILMS

DESC: SIMULATION (CO 60 I EBETRON 705 E BEAM REACTOR) ; EXPERIMENTAL

EFFT: X-RAY ; NEUTRON

REPN: C72 722/501 ; AFCRL TR 73 0081

SUJO: 3-225-000

TITL: EFFECTS OF NUCLEAR RADIATION ON MAGNETIC BUBBLE DOMAIN MATERIALS IN
DEVICES (U), 73 P., (U)

TREE: 340

.block

23098

.endblock

.block

copy: 1 id: 55640-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23104

AUTH: COURTNEY J.C.

CLSS: U

CORP: LOUISIANA STATE UNIVERSITY (BATON ROUGE, LA)

DATE: 7508

DESC: HANDBOOK

DESC: Cross Sections neutron L1

DESC: Cross Sections gamma L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1

DESC: Nuclear Physics Chemistry L1

REPN: ANS SD 14

SUJO: 3-312-220 ; 9-010-000 ; 9-820-000 ; 9-830-000

TITL: HANDBOOK OF RADIATION SHIELDING DATA (U), CA. 200 P., (U)

TREE: 411 ; 412

.block

23104

.endblock

.block

copy: 1 id: 55645-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23127

AUTH: WARD J.R. ; ROCCHIO J.J.

CLSS: U

CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)

DATE: 7510

DESC: Nuclear Weapon Effects ordnance propellants solid L1 AP

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

EFFT: NEUTRON

REPN: BRL MR 2550

SUJO: 3-164-000

SYST: SPRINT

TITL: EFFECT OF NEUTRON RADIATION ON THE VAPORIZATION OF AMMONIUM
PERCHLORATE; A COMBUSTION RELATED PROCESS (U), 65 P., (U)

.block

23127

.endblock

.block

copy: 1 id: 55661-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23129

AUTH: MYERS D.K. ; MARSHALL R.W.

CLSS: U

CONN: F 33615 72 C 1200

CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MT. VIEW, CA)

DATE: 7410

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

HARDENING

EFFT: TREE

REPN: AFML IR 500 1 (IX)

SUJO: 3-222-000

TITL: MANUFACTURING TECHNOLOGY ON RADIATION HARDENED MSI/LSI INTEGRATED
CIRCUITS (U), 22 P., (U)

TREE: 430 ; 320

.block

23129

.endblock

.block

copy: 1 id: 55663-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23130
AUTH: DELL'OCA C. ; MARSHALL R.W. ; AMIR G.D. ; NONENMACHER H.
CLSS: U
CONN: F 33615 72 C 1200
CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MT. VIEW, CA)
DATE: 7303
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 RESISTORS HARDENING
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
HARDENING
DESC: EXPERIMENTAL
EFFT: TREE
REPN: AFML IR 500 1 (III)
SUJO: 3-222-000 ; 3-229-000
TITL: MANUFACTURING TECHNOLOGY ON RADIATION HARDENED MSI/LSI INTEGRATED
CIRCUITS (U), 71 P., (U)
TREE: 430 ; 320
.block
23130
.endblock
.block
copy: 1 id: 55664-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23132
AUTH: FOSSUM J.G.
CLSS: U
CONN: AT (29 1) 789
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7309
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 RESISTORS
DESC: THEORY
EFFT: TREE
REPN: SLA 73 0702
SUJO: 3-229-000
TITL: THEORETICAL STUDY OF THE EFFECTS OF IONIZING RADIATION ON DIFFUSED
RESISTORS (U), 63 P., (U)
TREE: 380
.block
23132
.endblock
.block
copy: 1 id: 55666-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23135
AUTH: LOEWENSTEIN E.V. ; MURCRAY D.G.
CLSS: S
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA)

DATE: 7509
DESC: test instruments IR L5
DESC: HAES ICECAP MURCRAY PHENOMENON ; EXPERIMENTAL SUMMARY
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1 ICECAP 72-73 ROCKET/BALLOON DATA
DESC: Nuclear Weapon Environment Infrared Output source strength total
intensity L1
DESC: Emission Spectra of the Atmosphere L1
DESC: Nuclear Weapon Phenomenology High-Altitude auroras L1
REPN: AFCRL TR 75 0462 ; ERP 529
SUJO: 1-310-000 ; 2-215-000 ; 4-383-000 ; 5-600-000 ; 5-738-000
TEMP: B0541
TITL: ON THE ENHANCED INFRARED RADIATION IN THE AURORAL ZONE (U), 693 P.,
(S)

.block

23135

.endblock

.block

copy: 1 id: 55669-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23149
AUTH: SPICKLER R.M.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7510
DESC: Nuclear Weapon Effects electronic subsystems guidance control L1
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
EFFT: NEUTRON ; GAMMA
REPN: HDL TM 75 21
SUJO: 3-211-000
SYST: LEOPARD II (TANK)
TITL: RADIATION EVALUATION OF LEOPARD II TANK COMPONENT, TWO-AXIS RATE
GYRO (U), 28 P., (U)
TREE: 399

.block

23149

.endblock

.block

copy: 1 id: 55677-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23154
AUTH: BURGIO J.J.
CLSS: U
CCDE: ANISN (NEUTRON-GAMMA TRANSPORT ; ORNL)
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7512
DESC: Radiation Transport gamma L1

DESC: TABULAR
DESC: Radiation Transport neutron L1
REPN: AFWL TR 75 303 VOL. 1
SUJO: 9-620-000 ; 9-650-000
TITL: GAMMA, NEUTRON, AND SECONDARY GAMMA TRANSPORT IN INFINITE
HOMOGENEOUS AIR; VOL. 1, ASSUMPTIONS, CALCULATIONS AND RESULTS (U),
68 P., (U)
TREE: 960 ; 970

.block
23154

.endblock

.block

copy: 1 id: 55681-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23171

ABS: The collateral damage that can result from the precipitation
scavenging of nuclear aerosols produced by low-yield nuclear
explosions was investigated. The status of the scientific
understanding necessary to make estimates of rainout-produced
radiation fields, the development of models and methodologies for
rainout assessments, and attempts at removing uncertainties from
these models and assessment results are discussed. (CH) FALLOUT;
DIFFUSION; NUCLEAR EXPLOSIONS; FALLOUT; RADIOACTIVE AEROSOLS;
RADIATION HAZARDS; AERODYNAMICS; ATMOSPHERIC PRECIPITATIONS;
COMPUTER CALCULATIONS; PARTICLE SIZE; PREDICTION EQUATIONS;
UNDERGROUND EXPLOSIONS; WASHOUT

AUTH: KNOX J.B. ; MOLENKAMP C.R. ; HARVEY T.F. ; PETERSON K.R. ; BARBIERI
J.F. ; LANGE R. ; FULK M.M.

CLSS: U

CONN: W 7405 ENG 48

CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA)

DATE: 7509

DESC: Nuclear Weapon Environment fallout transfer L1

DESC: THEORY

DESC: Nuclear Weapon Environment Fallout Particles L1

DESC: Nuclear Weapon Environment fallout transport L1

REPN: UCRL 51625-75

SUJO: 2-222-000 ; 2-224-200 ; 2-224-300

TITL: PROGRESS IN RAINOUT RESEARCH AT LAWRENCE LIVERMORE
LABORATORY--FISCAL 1975 (U), 102 P., (U)

.block

23171

.endblock

.block

copy: 1 id: 55693-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23179

AUTH: BEER M. ; COHEN M.O.

CLSS: U
CONN: DCPA 01 74 C 0221
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, NY)
DATE: 7502
DESC: THEORY
DESC: Nuclear Weapon Effects structures aboveground components L1 CONCRETE
STRUCTURES HIGH RISE
EFFT: GAMMA ; FALLOUT
REPN: MAGI MR 7043
SUJO: 3-251-100
TITL: ADDITIONAL ADJOINT MONTE CARLO STUDIES OF THE SHIELDING OF CONCRETE
STRUCTURES AGAINST INITIAL GAMMA RADIATION (U), 66 P., (U)
TREE: 411

.block

23179

.endblock

.block

copy: 1 id: 55697-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23189
AUTH: CHADSEY W.L.
CLSS: U
CCDE: TDQED ; POEM
CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA)
DATE: 7401
DESC: Radiation Transport x-ray L1 GOLD-POLYETHYLENE INTERFACE
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 POLYETHYLENE
DESC: THEORY
EFFT: TREE
EMPF: 391
REPN: SAI 74 512 WA
SUJO: 3-229-000 ; 9-640-000
TITL: NONEQUILIBRIUM DOSE IN DIELECTRICS; QUARTERLY STATUS REPORT 2 (U),
12 P., (U)
TREE: 980 ; 385

.block

23189

.endblock

.block

copy: 1 id: 55706-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23199
AUTH: LURIE N.A. ; HARRIS L. JR. ; STEINMAN D.K. ; YOUNG J.C. ;
FRIESENHAHN S.J. ; WONDRA J.P.
CLSS: U
CCDE: SANDYL
CONN: F 19628 74 C 0210

CORP: INELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7501
DESC: Radiation Transport neutron L1
DESC: EXPERIMENTAL
REPN: AFCRL TR 75 0080 ; INTEL RT 8117 004
SUJO: 9-650-000
TITL: INTEGRAL MEASUREMENT OF NEUTRON-INDUCED DOSE IN TANTALUM (U), 60 P.,
(U)

TREE: 970

.block

23199

.endblock

.block

copy: 1 id: 55718-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23203

AUTH: POWELL R.J. ; HUGHES G.W.

CLSS: U

CONN: N 00014 74 C 0185

CORP: RCA LABS. (PRINCETON, NJ)

DATE: 7501

DESC: THEORY EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes

silicon-controlled rectifiers L1

EFFT: TREE

REPN: PRRL 75 CR 11

SUJO: 3-221-000

TITL: RADIATION AND CHARGE TRANSPORT IN SI02 (U), 63 P., (U)

TREE: 200

.block

23203

.endblock

.block

copy: 1 id: 55720-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23207

AUTH: LURIE N.A.

CLSS: U

CCDE: SANDYL

CONN: F 19628 75 C 0188

CORP: INELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7510

DESC: test instruments nuclear radiation gamma L1

DESC: EXPERIMENTAL TABULAR

REPN: AFCRL TR 75 0562 ; INTEL RT 8136 001

SUJO: 4-341-000

TITL: GAMMA-RAY ENERGY DEPOSITION IN SILICON DETECTORS (U), 53 P., (U)

TREE: 651

.block

23207

.endblock

.block

copy: 1 id: 55724-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23208

AUTH: EISEN H.A. ; EPSTEIN A.S. ; POLIMADEI R.A.

CLSS: U

CORP: HARRY DIAMOND LABS. (ADELPHI, MD)

DATE: 7508

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: HDL PR 75 3

SUJO: 3-222-000

TITL: TESTING AND CHARACTERIZATION OF RADIATION HARDENED C-MOS DEVICES

(U), 48 P., (U)

TREE: 325

.block

23208

.endblock

.block

copy: 1 id: 55725-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23229-1

AUTH: KING J.C. ; SANDER H.H.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7500

DESC: SIMULATION (HERMES) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 QUARTZ RESINATORS

EFFT: NEUTRON ; GAMMA

SUJO: 3-229-000

SYMJ: RADIATION EFFECTS 1975, VOL. 26

TITL: TRANSIENT CHANGES IN QUARTZ RESONATORS FOLLOWING EXPOSURE TO PULSE
IONIZATION (U), 10 P., (U)

TREE: 367

.block

23229-1

.endblock

.block

copy: 1 id: 55743-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23229-2
AUTH: HARTMAN E.F. ; KING J.C.
CLSS: U
CCDE: SANDYL (MC RAD TRANSPORT) SANDIA
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7500
DESC: SIMULATION (HERMES)
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 QUARTZ RESINATORS
SUJO: 3-229-000
SYMJ: RADIATION EFFECTS 1975, VOL. 26
TTTL: CALCULATION OF TRANSIENT THERMAL IMBALANCE WITHIN CRYSTAL UNITS
FOLLOWING EXPOSURE TO PULSE IRRADIATIO (U), 5 P., (U)

TREE: 367

.block

23229-2

.endblock

.block

copy: 1 id: 55744-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23230
AUTH: MARRAFFINO P. ; ROGICH S.G. ; ROGERS J.M.
CLSS: U
CONN: F 29601 73 C 0059
CORP: SPERRY RAND CORP. (GREAT NECK, NY)
DATE: 7407
DESC: SIMULATION (REACTOR FEBETRON CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: TREE
REPN: SGD 4282 0791
SUJO: 3-221-000
TTTL: DESIGN AND FABRICATION OF RADIATION-HARDENED MNOS MEMORY ARRAY (U),
212 P., (U)
TREE: 430 ; 430

.block

23230

.endblock

.block

copy: 1 id: 55745-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23232P.13
AUTH: WANG C.G. ; DISTEFANO T.H.
CLSS: U
CORP: IBM CORP. (YORKTOWN HEIGHTS, NY)
DATE: 7401
DESC: THEORY
DESC: Radiation Transport x-ray L1

EFFT: TREE
SUJO: 9-640-000
SYMJ: PHYSICS OF INTERFACE INTERACTIONS RELATED TO RELIABILITY OF FUTURE
ELECTRONIC DEVICES

TITL: PHOTON ASSISTED TUNNELING IN INTERNAL PHOTOEMISSION; I, THEORY (U),
9 P., (U)

TREE: 980

.block

23232P.13

.endblock

.block

copy: 1 id: 55748-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23245

AUTH: WILLIAMS R.A.

CLSS: U

CONN: F 19628 73 C 0250

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7310

DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1

DESC: SIMULATION (CO 60 E BEAM) ; EXPERIMENTAL

EFFT: TREE

REPN: C73 1102/501 ; AFCRL TR 73 0712

SUJO: 3-225-000

TITL: EFFECTS OF NUCLEAR RADIATION ON MAGNETIC BUBBLE DOMAIN MATERIALS AND
DEVICES (U), 46 P., (U)

TREE: 343

.block

23245

.endblock

.block

copy: 1 id: 55762-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23249

AUTH: WILLIAMS R.A.

CLSS: U

CONN: F 19628 73 C 0250

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7501

DESC: SIMULATION (CO 60 REACTOR FEBETRON E BEAM X-RAY MACHINE) ;
EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1

EFFT: TREE

REPN: AFCRL TR 75 0037 ; C73 554/501

SUJO: 3-225-000

TITL: EFFECTS OF NUCLEAR RADIATION ON MAGNETIC BUBBLE DOMAIN MATERIALS AND
DEVICES (U), 90 P., (U)

TREE: 340

.block

23249

.endblock

.block

copy: 1 id: 55766-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23251

AUTH: BRUNCKE W.C. ; CRABBE J.S. ; HOPKINS G.G. ; LIPMAN J.A. ; MANUS D.J.
; MATZEN W.T.

CLSS: U

CONN: N 00164 73 C 0420

CORP: TEXAS INSTRUMENTS, INC. (DALLAS, TX)

DATE: 7411

DESC: SIMULATION (SEM CO 60) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS DIODES

EFFT: TREE

REPN: TI 03 74 33

SUJO: 3-221-000

TITL: STUDY OF THE CORRELATION BETWEEN BIPOLAR TRANSISTOR OXIDE
CHARACTERISTICS AND THE PARAMETER SHIFTS IN THESE DEVICES DUE TO
IONIZING RADIATION (U), 64 P., (U)

TREE: 310 ; 649

.block

23251

.endblock

.block

copy: 1 id: 55768-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23253

AUTH: DELL'OCA C. ; AMIR G.D. ; MARSHALL R.W. ; NONNENMACHER H.G.

CLSS: U

CONN: F 33615 72 C 1200

CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MOUNTAIN VIEW, CA)

DATE: 7309

DESC: SIMULATION (LINAC FXR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
MULTIPLIER COUNTER

EFFT: TREE

REPN: AFML IR 500 1 (V)

SUJO: 3-222-000

TITL: MANUFACTURING TECHNOLOGY ON RADIATION HARDENED MSI/LSI INTEGRATED
CIRCUITS (U), 70 P., (U)

TREE: 430

.block

23253

.endblock

.block

copy: 1 id: 55770-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23254
AUTH: DELL'OCA C. ; AMIR G.D. ; MARSHALL R.W. ; NONNENMACHER H.G.
CLSS: U
CONN: F 33615 72 C 1200
CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MOUNTAIN VIEW, CA)
DATE: 7403
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
GATE CIRCUITS
DESC: SIMULATION (LINAC FLASH X-RAY REACTOR) ; EXPERIMENTAL
EFFT: TREE
REPN: AFML IR 500 1 (VII)
SUJO: 3-221-000 ; 3-222-000
TITL: MANUFACTURING TECHNOLOGY ON RADIATION HARDENED MSI/LSI INTEGRATED
CIRCUITS (U), 74 P., (U)
TREE: 430 ; 320

.block
23254
.endblock

.block
copy: 1 id: 55771-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23255
AUTH: DELL'OCA C.J. ; MARSHALL R.W.
CLSS: U
CONN: F 33615 72 C 1200
CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MOUNTAIN VIEW, CA)
DATE: 7408
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFML IR 500 1 (VIII)
SUJO: 3-222-000
TITL: MANUFACTURING TECHNOLOGY ON RADIATION HARDENED MSI/LSI INTEGRATED
CIRCUITS (U), 36 P., (U)
TREE: 430 ; 320

.block
23255
.endblock

.block
copy: 1 id: 55772-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23274
AUTH: DELL'OCA C.J. ; MARSHALL R.W.
CLSS: U
CONN: F 19628 72 C 0331
CORP: FAIRCHILD CAMERA AND INSTRUMENT CORP. (MOUNTAIN VIEW, CA)
DATE: 7311
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 FILM RESISTOR
FABRICATION
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
HARDENING
EFFT: TREE
REPN: AFCRL TR 73 0763
SUJO: 3-222-000 ; 3-229-000
TITL: MODIFIED ISOPLANAR PROCESS FOR RADIATION HARDENED DIELECTRICALLY
ISOLATED INTEGRATED CIRCUITS (U), 103 P., (U)
TREE: 430
.block
23274
.endblock
.block
copy: 1 id: 55787-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23282
ADNO: C003582
AUTH: GILBERT R.M. ; GENUARIO R.D. ; BROMBORSKY A.
CLSS: SRD
CONN: MIPR 75 501
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7506
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: EXPERIMENTAL
EFFT: IEMP
EMPF: 391
REPN: HDL TR 1691
SHOT: DIDO QUEEN
TSHO: UG-CONTAINED
SUJO: 3-221-000
TEMP: B0554
TITL: MEASUREMENTS OF RADIATION-INDUCED CURRENTS IN LOW-IMPEDANCE
PARALLEL-PLATE DIODES (U), 25 P., (SRD)
.block
23282
.endblock
.block
copy: 1 id: 55793-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23283
AUTH: MEREWETHER D.E. ; RADASKY W.A.
CLSS: U
CONN: DAHC 60 72 C 0038
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7400
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
DESC: THEORY
EFFT: IEMP
EMPF: 391
REPN: AMRC N 4
SUJO: 3-259-400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, VOL. NS-21, NO. 1, FEBRUARY
1974
TTTL: NONLINEAR ELECTROMAGNETIC FIELDS WITHIN A CYLINDRICAL CAVITY EXCITED
BY IONIZING RADIATION (U), 8 P., (U)

.block

23283

.endblock

.block

copy: 1 id: 55794-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23284
AUTH: MEREWETHER D.E. ; EZELL T.F.
CLSS: U
CONN: DAHC 60 72 C 0038
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7400
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
DESC: THEORY
EFFT: EMP
EMPF: 388
REPN: AMRC R 15
SUJO: 3-259-400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, VOL. NS-21, NO. 5, OCTOBER
1974
TTTL: INTERACTION OF CYLINDRICAL POSTS AND RADIATION-INDUCED ELECTRIC
FIELD PULSES IN IONIZED MEDIA (U), 10 P., (U)

.block

23284

.endblock

.block

copy: 1 id: 55795-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23285
AUTH: HILL J.R. ; WILSON M.R.

CLSS: U
CONN: DAHC 60 72 C 0038
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7400
DESC: Nuclear Weapon Effects missile systems L1
DESC: THEORY
EFFT: EMP
EMPF: 362 ; 388
REPN: AMRC N 22
SUJO: 3-112-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, VOL. NS-21, NO. 4 DECEMBER
1974
TITL: NONLINEAR SELF-CONSISTENT CALCULATIONS OF RADIATION INDUCED CYLINDER
SKIN CURRENTS (U), 7 P., (U)

.block

23285

.endblock

.block

copy: 1 id: 55796-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23287
AUTH: KREY K.H.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7510
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects land transport armored vehicles L1
EFFT: TREE
REPN: HDL TM 75 16
SUJO: 3-151-000
TITL: RADIATION EVALUATION OF LEOPARD II TANK COMPONENT, POWDER
TEMPERATURE SENSOR (U), 22 P., (U)
TREE: 369 ; 399

.block

23287

.endblock

.block

copy: 1 id: 55798-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23290
AUTH: LEE F.
CLSS: U
CONN: N 00014 74 C 0451
CORP: RCA SOLID STATE TECHNOLOGY CENTER (SOMERVILLE, NJ)
DATE: 7511
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SUMMARY
EFFT: TREE

SUJO: 3-222-000
TITL: IMPROVED RADIATION HARDENSS OF BIPOLAR LINEAR CIRCUITS (U), 25 P.,
(U)

TREE: 430

.block
23290

.endblock

.block

copy: 1 id: 55800-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23307

AUTH: BLEDSOE J. ; SALTICH J.

CLSS: U

CONN: F 19628 71 C 0157

CORP: MOTOROLA, INC. (PHOENIX, AZ)

DATE: 7408

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

DESC: SIMULATION ; EXPERIMENTAL

EFFT: NEUTRON ; BETA

REPN: AFCRL TR 74 0454

SUJO: 3-221-000

TITL: RADIATION HARDENED BIPOLAR HIGH VOLTAGE POWER TRANSISTOR (U), 34 P.,
(U)

TREE: 430

.block
23307

.endblock

.block

copy: 1 id: 55807-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23309

AUTH: KUHN G.L. ; PRICE J.B.

CLSS: U

CONN: F 19628 72 C 0308

CORP: MOTOROLA, INC. (PHOENIX, AZ)

DATE: 7310

DESC: SUMMARY

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability
L1

REPN: L 71 ; AFCRL TR 74 0050

SUJO: 3-221-000 ; 4-170-000

TITL: RADIATION EFFECTS ON DISCRETE DEVICES AND INTEGRATED CIRCUITS
FABRICATED IN SOIS (U), 137 P., (U)

TREE: 430

.block

23309

.endblock

.block

copy: 1 id: 55809-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23312

ADNO: B007282L

AUTH: HYMAN E.

CLSS: U

CONN: N 00014 74 C 0166

CORP: SCIENCE APPLICATIONS, INC.

DATE: 7509

REPN: SAI 151 00 166

TITL: OPTICAL AND INFRARED RADIATION FROM NUCLEAR BURSTS (U), CA. 300 P.,

(U)

.block

23312

.endblock

.block

copy: 1 id: 55811-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23312-A

AUTH: STRICKLAND D.J. ; BOOK D.L. ; COFFEY T.P. ; FEDDER J.A.

CLSS: U

CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA) ; NAVAL RESEARCH LAB.

(WASH., DC)

DATE: 7509

DESC: radio microwave propagation abnormal conditions auroral disturbances

sudden ionospheric disturbances SID polar cap absorptions PCA solar

eclipse L1

DESC: Radiation Transport electron L1

SUJO: 5-738-000 ; 9-680-000

SYMJ: OPTICAL AND INFRARED RADIATION FROM NUCLEAR BURSTS

TITL: TRANSPORT TECHNIQUES FOR DESCRIBING SCATTERING AND ENERGY DEPOSITION

OF ENERGETIC AURORAL ELECTRONS (U), 44 P., (U)

.block

23312-A

.endblock

.block

copy: 1 id: 55812-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23312-B

AUTH: STRICKLAND D.J. ; BERSTEIN I.B.

CLSS: U

CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA) ; YALE UNIVERSITY (NEW

HAVEN, CT)

DATE: 7509
DESC: Radiation Transport electron L1
SUJO: 9-680-000
SYMJ: OPTICAL AND INFRARED RADIATION FROM NUCLEAR BURSTS
TTTL: ANGULAR PROPERTIES OF PARTICLE FLUXES FOR STRONGLY FORWARD PEAKED
SCATTERING (U), 30 P., (U)

.block

23312-B

.endblock

.block

copy: 1 id: 55813-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23312-D
AUTH: GOLDMAN S.R. ; SCANNAPIECO A.J. ; BAKER L. ; OSSAKOW S.L.
CLSS: U
CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA) ; NAVAL RESEARCH LAB.
(WASH., DC)

DATE: 7509
DESC: SIMULATION (CHEMICAL RELEASE) ; THEORY
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1 STRIATIONS

TSHO: HI-ALT
SUJO: 2-211-000
SYMJ: OPTICAL AND INFRARED RADIATION FROM NUCLEAR BURSTS
TTTL: COUPLED BARIUM CLOUD-IONOSPHERE SYSTEMS; 4.STRIATION PENETRATION
INTO AN INHOMOGENEOUS IONOSPHERE (U), 83 P., (U)

.block

23312-D

.endblock

.block

copy: 1 id: 55814-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23314
AUTH: ZULEEG R. ; BEHLE A.F.
CLSS: U
CONN: F 19628 73 C 0245
CORP: MCDONNELL DOUGLAS ASTRONAUTICS CO. (HUNTINGTON BEACH, CA)
DATE: 7310
DESC: SIMULATION (CO 60 REACTOR FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L1
GA AS JFET

EFFT: TREE
REPN: MDC G5033 ; AFCRL TR 73 0666
SUJO: 3-213-000
TTTL: RADIATION TOLERANCE OF GAAS BROADBAND APMLIFIER (U), 40 P., (U)
TREE: 369

.block

23314
.endblock
.block
copy: 1 id: 55816-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23326
AUTH: ROBERTS J.P. ; WICKLUND J.S.
CLSS: U
CCDE: FASTER III (RADIATION TRANSPORT ; N ; GAMMA) HDL
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7510
DESC: Radiation Transport gamma L1
DESC: Radiation Transport neutron L1
DESC: THEORY TABULAR
EMPF: 240
REPN: HDL TR 1727
TSHO: HI-ALT
SUJO: 9-620-000 ; 9-650-000
TTTL: TRANSIENT IONIZATION EFFECTS FROM NEUTRON-SECONDARY GAMMA RADIATION
IN THE UPPER ATMOSPHERE (U), 111 P., (U)

.block
23326
.endblock
.block
copy: 1 id: 55826-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23351
AUTH: FRIEBELE E.J.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7500
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: SIMULATION (CO 60 FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-133-000
SYMJ: APPLIED PHYSICS LETTERS; VOL. 27, NO. 4, 15 AUGUST 1975
TTTL: RADIATION PROTECTION OF FIBER OPTIC MATERIALS --EFFECT OF CERIUM
DOPING ON THE RADIATION-INDUCED ABSORPTION (U), 3 P., (U)
TREE: 361

.block
23351
.endblock
.block
copy: 1 id: 55846-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23356
AUTH: KILLIANY J.M. ; SAKS N.S. ; BAKER W.D. ; BARBE D.F.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7400
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
CCD
EFFT: TREE
SUJO: 3-222-000
SYMJ: APPLIED PHYSICS LETTERS; VOL. 24, NO. 10, 15 MAY 1974
TITL: EFFECTS OF RADIATION ON BURIED-CHANNEL CCDS WITH DOPED POLYSILICON
GATES AND UNDOPED POLYSILICON INTERELECTRODE ISOLATION (U), 3 P.,
(U)
TREE: 320
.block
23356
.endblock
.block
copy: 1 id: 55851-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23357
AUTH: BARBE D.F. ; KILLIANY J.M. ; HUGHES H.L.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
CCD
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
EFFT: GAMMA
SUJO: 3-222-000
SYMJ: APPLIED PHYSICS LETTERS; VOL. 23, NO. 7, 1 OCTOBER 1973
TITL: EFFECTS OF GAMMA RADIATION ON CHARGE-COUPLED DEVICES (U), 3 P., (U)
TREE: 320
.block
23357
.endblock
.block
copy: 1 id: 55852-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23365
AUTH: BILLINGSLEY F.P.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LAB. (HANSCOM AFB, MA)
DATE: 7511
DESC: Radiation Transport IR L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow

fluorescence L1

DESC: Emission Spectra of the Atmosphere L1
REPN: AFCRL TR 75 0586 ; PSRP 651
SUJO: 2-214-000 ; 5-600-000 ; 9-670-000
TITL: CALCULATED VIBRATION-ROTATION INTENSITIES AND LINE POSITIONS FOR
GROUND STATE NITRIC OXIDE (U), 183 P., (U)

.block

23365

.endblock

.block

copy: 1 id: 55859-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23366
AUTH: ROGERS J.W.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA)
DATE: 7510
DESC: HAES ICECAP ; EXPERIMENTAL
DESC: test instruments IR L5
DESC: Emission Spectra of the Atmosphere L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
REPN: AFCRL TR 75 0535 ; HAES 23 ; ERP 539
SUJO: 4-383-000 ; 4-820-600 ; 5-600-000
TITL: INSTRUMENTATION ANALYSIS AND DATA PROCESSING FOR ROCKETBORNE LWIR
SPECTROMETERS (WITH APPLICATION TO ROCKET A18.006-2 OF 22 MARCH
1973) (U), 50 P., (U)

.block

23366

.endblock

.block

copy: 1 id: 55860-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23381
ADNO: B007616
AUTH: KALLMEYER D. ; KOEHN O. ; ROOSE U.J.
CLSS: U
CORP: BUNDESMINISTERIUM DER VERTEIDIGUNG FORSCHUNGSBERICHT, AUS DER
WEHRTECHNIK (WEST GERMANY)
DATE: 7400
DESC: test instruments nuclear radiation gamma L1
REPN: BMVG FBWT 74 14
SUJO: 4-341-000
TITL: CALORIMETRIC MEASUREMENT OF ABSORPTION DOSAGE IN A PULSED GAMMA RAY
FIELD (U), 34 P., (U)

TREE: 651

.block

23381

.endblock

.block

copy: 1 id: 55887-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23387

AUTH: MADALA R.V. ; PIACSEK S.A. ; ZALESAK S.T.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7510

DESC: THEORY

DESC: General Atmospheric Properties L1

DESC: Meteorology L1

DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1

REPN: NRL MR 3145

SUJO: 5-100-000 ; 5-500-000 ; 5-800-000

TITL: SEMI-SPECTRAL NUMERICAL MODEL FOR FORCED, VERTICALLY PROPAGATING
PLANETARY WAVES; PT. 1, APPLICATION OF THE MODEL TO LINEAR DIURNAL
AND SEMI-DIURNAL ATMOSPHERIC THERMAL TIDES (U), 57 P., (U)

.block

23387

.endblock

.block

copy: 1 id: 55888-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23390

ABS: This manual establishes certain nuclear and explosives safety
criteria relative to the transportation, storage, handling, and
processing of nuclear weapons and nuclear components. In addition,
it provides tritium safety and monitoring requirements, procedures
for the processing and approving of plutonium safety criteria
waivers, and guidance for obtaining assistance in the resolution of
problems associated with other safety criteria established in this
manual.

CLSS: SRD

CORP: DEFENSE NUCLEAR AGENCY (WASH., DC)

DATE: 7507

DESC: TABULAR

DESC: Nuclear weapon storage L1

DESC: Nuclear weapon handling L1

DESC: Nuclear weapon transport L1

DESC: monitoring identification of unexploded devices stockpile radiant
emissions intrinsic radiations L1

DESC: Nuclear weapon safety L1

DESC: Nuclear weapon safety radiological L1

REPN: DNA TP 20 7

SUJO: 4-832-100 ; 4-832-200 ; 4-832-400 ; 4-838-000 ; 4-838-100 ;

4-839-000

TEMP: B0795
TITL: NUCLEAR SAFETY CRITERIA; TECHNICAL MANUAL (U), 46 P., (SRD)
TNFF: 8310

.block
23390

.endblock

.block

copy: 1 id: 55891-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23393
AUTH: MARRAFFINO P. ; ROGERS J.M. ; ROGICH S.G. ; WEGENER H.A.R.
CLSS: U
CONN: F 29601 73 C 0059
CORP: SPERRY RAND CORP. (GREATNECK, NY)
DATE: 7507
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
DESC: THEORY EXPERIMENTAL
EFFT: TREE
REPN: AFWL TR 74 209
SUJO: 3-212-000
TITL: DESIGN AND FABRICATION OF RADIATION-HARDENED MNOS MEMORY ARRAY (U),
220 P., (U)
TREE: 420 ; 341

.block

23393

.endblock

.block

copy: 1 id: 55892-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23394
AUTH: ANTINONE R.J. ; LEDBETTER J.D.
CLSS: U
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7508
DESC: SURVEY
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFWL TR 75 69
SUJO: 3-222-000
TITL: COMPLEMENTARY METAL OXIDE SEMICONDUCTOR HARDENED FUNCTIONS AND
RADIATION FAILURE CRITERIA (U), 52 P., (U)
TREE: 250 ; 325 ; 430

.block

23394

.endblock

.block

copy: 1 id: 55893-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23475
AUTH: SACCENTI J.C. ; WOOLSON W.A.
CLSS: U
CCDE: MORSE (N TRANSPORT)
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)
DATE: 7508
DESC: Radiation Transport neutron L1
REPN: BRL R 1811
TSHO: SURFACE
SUJO: 9-650-000
TTTL: COMPARISON OF AIR-OVER-GROUND TRANSPORT CALCULATIONS USING DIFFERENT
CROSS SECTIONS (U), 24 P., (U)
TREE: 970

.block

23475

.endblock

.block

copy: 1 id: 55952-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23482
ADNO: A020812
AUTH: ROBERTS J.P. ; WICKLUND J.S.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7510
DESC: Nuclear Weapon Phenomenology ionization mechanisms chemistry initial
gamma L1

DESC: THEORY

EMPF: 240

REPN: HDL TR 1725

TSHO: HI-ALT

SUJO: 2-312-200

TTTL: TRANSIENT IONIZATION EFFECTS FROM PRIMARY GAMMA FISSION RADIATION IN
THE UPPER ATMOSPHERE (U), 53 P., (U)

.block

23482

.endblock

.block

copy: 1 id: 55956-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23486
AUTH: PHILLIPS D.H. ; PANCHOLY R.K.
CLSS: U
CONN: F 29601 73 C 0055
CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)

DATE: 7507
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
NOR GATE NAND GATE TRANSMISSION GATE INVERTER
DESC: THEORY
EFFT: TREE
REPN: AFWL TR 74 243 VOL. 2
SUJO: 3-222-000
TITL: COMPLEMENTARY-SYMMETRY/METAL OXIDE SEMICONDUCTOR (CMOS) CIRCUIT
HARDENING; VOL. 2, SILICON-ON-SAPPHIRE (SOS) CIRCUIT DESIGN
OPTIMIZATION AND RADIATION EFFECTS STUDIES (U), 264 P., (U)
TREE: 610 ; 320

.block
23486
.endblock
.block

copy: 1 id: 55959-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 23502
ADNO: B010172L
AUTH: REAGAN J.B. ; JOHNSON R.G. ; IMHOF W.L. ; SHARP R.D.
CLSS: U
CCDE: PROTON ; AURORA ; BREMGAT ; FOTONQ ; MCBREM ; WEPH V
CONN: N 00014 70 C 0203
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7506
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: Simulation Facilities Techniques EM propagation atmospheric
chemistry high-altitude phenomenology L1
DESC: test instruments x-ray effects L1
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: HAES ICECAP ; EXPERIMENTAL
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
REPN: LMSC D501137
SUJO: 4-120-000 ; 4-220-000 ; 4-230-000 ; 4-330-000 ; 4-820-600 ;
4-823-000 ; 5-400-000 ; 5-738-000
TITL: SIMULATION OF HIGH-ALTITUDE NUCLEAR EFFECTS (U), 295 P., (U)
.block
23502
.endblock
.block

copy: 1 id: 55973-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

INUM: 23527
ADNO: A022260
AUTH: FISHBINE B.H. ; DALICH S.J. ; WOOD J.N.
CLSS: U
CCDE: SCX (EMP ENVIRONMENT)
CONN: F 29601 74 C 0006
CORP: SCIENCE APPLICATIONS CORP. (LA JOLLA, CA)
DATE: 7511
DESC: THEORY
DESC: Nuclear Weapon Environment Induced Electromagnetic Pulse EMP L1
EMPF: 252 ; 223
REPN: AFWL TR 74 338 ; SAI 74 505 AQ
TSHO: SURFACE
SUJO: 2-510-000
TTTL: SELF-CONSISTENCY AND RADIATION ENHANCED GROUND CONDUCTIVITY IN THE
SURFACE BURST CODE SCX (U), 54 P., (U)

copy: 1 id: 56014-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

INUM: 23542
AUTH: HENSON R.M. ; PREEG W.E. ; BOND H.H. ; GURSKY M.L. ; HENSON R.M. ;
PREEG W.E. ; SPANGENBERG W.H.
CLSS: SRD CNWDI
CONN: W 7405 ENG 36
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM)
DATE: 7512
DESC: Nuclear Weapon Environment X-ray Output energy spectrum L1 MING
BLADE HUSKY ACE
DESC: Nuclear weapon test burn performance L1
DESC: Nuclear Weapon Environment Initial Gamma dose rate pulse width L1
DESC: EXPERIMENTAL SUMMARY
DESC: Nuclear Weapon Environment X-ray Output rate L1
DESC: Nuclear weapon test device physical operation construction geometry
materials components L1
REPN: LA 6166 PR
SHOT: MING BLADE ; HUSKY ACE ; VISE ; KING ; SMALL BOY ; OSAGE ; GUNDI
PRIME
TSHO: SURFACE ; UG-CONTAINED ; LOW-ALT
SOCE: [REDACTED]
SUJO: 1-620-000 ; 1-640-000 ; 1-740-000 ; 4-836-000 ; 4-837-000
TEMP: B1391
TTTL: RADIATION CHARACTERIZATION PROGRAM; JULY 1, 1974-JUNE 30, 1975 (1
18 P., (SRD CNWDI)
TREE: 910 ; 930
.block
23542

.endblock

.block

copy: 1 id: 56027-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23629
ADNO: B008955L
AUTH: FROULA N.H. ; STRETANSKI E.D. ; FOREMAN W.
CLSS: U
CCDE: ELTRAN
CONN: F 33615 74 C 5053
CORP: KTECH CORP. (ALBUQUERQUE, NM)
DATE: 7509
DESC: Nuclear Weapon Effects materials composites L1
DESC: SIMULATION ; THEORY EXPERIMENTAL
DESC: Radiation Transport electron L5 CODE CALCULATIONS
EFFT: THERMAL
REPN: AFML TR 75 131 PT. 4 ; TR 75 12
SUJO: 3-249-000 ; 9-680-000
TTTL: NUCLEAR VULNERABILITY OF THERMAL PROTECTION MATERIALS; PT. 4,
ELECTRON BEAM TESTS TO DETERMINE THE RESPONSE OF 3-DIMENSIONAL
CARBON-PHENOLIC COMPOSITES (U), 39 P., (U)

.block

23629

.endblock

.block

copy: 1 id: 56074-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23666
ADNO: A019453
AUTH: VONDERSAAR F.J.
CLSS: U
CORP: AIR FORCE MATERIALS LAB. (WRIGHT-PATTERSON AFB, OH)
DATE: 7509
DESC: SIMULATION (QLB) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects flight systems airplanes materials L1
DESC: Simulation Facilities Techniques thermal optical L1 QUARTZ LAMP BANK
EFFT: THERMAL
REPN: AFML TR M5 83
SUJO: 3-111-200 ; 4-280-000
TTTL: AEROSPACE MATERIALS RESPONSE TO INTENSE THERMAL RADIATION (U), 34
P., (U)

.block

23666

.endblock

.block

copy: 1 id: 56095-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23672
ADNO: 921125L
AUTH: PATTERSON R.B. ; ENRIQUEZ L.E.
CLSS: U
CONN: DAAG 46 73 C 0122
CORP: HARRIS SEMICONDUCTOR (MELBOURNE, FL)
DATE: 7406
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: THEORY
REPN: AMMRC CTR 74 46
SUJO: 3-222-000
TITL: RADIATION HARDENED INTEGRATED CIRCUIT AMPLIFIER (U), 82 P., (U)
TREE: 320 ; 430

.block

23672

.endblock

.block

copy: 1 id: 56100-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23683
AUTH: EPSTEIN A.S. ; EISEN H.A.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7511
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: HDL TR 1731
SUJO: 3-222-000
TITL: SURVEY OF RADIATION EFFECTS IN METAL-INSULATOR-SEMICONDUCTOR DEVICES
(U), 128 P., (U)
TREE: 325 ; 430

.block

23683

.endblock

.block

copy: 1 id: 56109-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23693
ADNO: C004366L
AUTH: IMHOF W.L. ; JOHNSON R.G. ; REAGAN J.B. ; NAKANO G.H. ; NAST T.C.
CLSS: S
CONN: N 00014 69 C 0372
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7510
DESC: Nuclear Weapon Environment fallout transport L1

DESC: EXPERIMENTAL
DESC: test instruments nuclear radiation gamma L1
DESC: nuclear test detection debris fallout L1
REPN: LMSC L021082
SHOT: cpr(73-06-27) ; cpr(74-06-17)
TSHO: LOW-ALT
SUJO: 2-224-200 ; 4-341-000 ; 4-919-000
TEMP: B1441
TITL: HIGH-RESOLUTION GAMMA-RAY SPECTROSCOPY STUDY (U), 191 P., (S)

.block

23693

.endblock

.block

copy: 1 id: 56128-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23784
ADNO: 920985L
AUTH: SCHLESIER K.M. ; KOKKAS A.G.
CLSS: U
CONN: F 19628 73 C 0146
CORP: RCA LABS. (PRINCETON, NJ)
DATE: 7401
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: THEORY EXPERIMENTAL
EFFT: TREE
REPN: AFCRL TR 74 0075 ; PRRL 74 CR 15
SUJO: 3-222-000
TITL: RADIATION-HARDENED A1203 CMOS/SOS INTEGRATED CIRCUITS (U), 62 P.,
(U)

TREE: 325 ; 430

.block

23784

.endblock

.block

copy: 1 id: 56183-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23799
ADNO: B006447L
AUTH: KOPP R.
CLSS: U
CONN: F 19628 74 C 0109
CORP: FAIRCHILD SEMICONDUCTOR (MOUNTAIN VIEW, CA)
DATE: 7502
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFCRL TR 75 0153
SUJO: 3-222-000
TITL: INVESTIGATION OF THIN-FILM SILICON PROCESS FOR RADIATION HARDENED

MIS INTEGRATED CIRCUITS (U), 38 P., (U)

TREE: 320 ; 430

.block

23799

.endblock

.block

copy: 1 id: 56187-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23814

AUTH: FOWKES F.M. ; DAHLKE W.E. ; BUTLER S.R.

CLSS: U

CONN: DAAG 39 74 C 0105

CORP: LEHIGH UNIVERSITY (BETHLEHEM, PA)

DATE: 7509

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: EXPERIMENTAL

EFFT: TREE

REPN: HDL CR 75 105 1

SUJO: 3-222-000

TITL: RADIATION EFFECTS IN MOS GATE INSULATORS (U), 84 P., (U)

TREE: 325 ; 430

.block

23814

.endblock

.block

copy: 1 id: 56193-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23846

ADNO: C002543

CLSS: SRD

CORP: ARMY NUCLEAR AGENCY (FT. BLISS, TX)

DATE: 7410

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1

DESC: THEORY EXPERIMENTAL

SUJO: 3-312-100

TEMP: B1440

TITL: RADIATION CASUALTY CRITERIA FOR BATTLEFIELD TARGETS (U), 81 P.,
(SRD)

.block

23846

.endblock

.block

copy: 1 id: 56222-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23910

ADNO: B005341L
AUTH: BENIMA D.
CLSS: U
CONN: F 33615 73 C 1322
CORP: RCA ADVANCED TECHNOLOGY LABS. (CAMDEN, NJ)
DATE: 7503
DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1
DESC: TABULAR
REPN: AFAL TR 75 29
SUJO: 3-225-000
TITL: RADIATION HARDENED MNOS MEMORY PROGRAM (U), 74 P., (U)
TREE: 341 ; 430

.block

23910

.endblock

.block

copy: 1 id: 56277-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 23914
ADNO: B007680L
AUTH: ROGICH S.
CLSS: U
CONN: F 33615 73 C 1266
CORP: SPERRY GYROSCOPE (GREAT NECK, NY)
DATE: 7509
DESC: TABULAR
DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
REPN: AFAL TR 75 8 ; SGD 4282 0818
SUJO: 3-212-000 ; 3-225-000
TITL: DESIGN OF RADIATION HARDENED MNOS MEMORY (U), 73 P., (U)
TREE: 341 ; 430 ; 343 ; 325

.block

23914

.endblock

.block

copy: 1 id: 56280-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24031
AUTH: ZULEEG R. ; LEHOVEC K.
CLSS: U
CONN: F 19628 74 C 0129
CORP: MCDONNELL DOUGLAS ASTRONAUTICS CO. (HUNTINGTON BEACH, CA)
DATE: 7505
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 GA AS TFET
DESC: SIMULATION (CO 60 N GENERATOR) ; EXPERIMENTAL
EFFT: TREE

REPN: AFCRL TR 75 0304
SUJO: 3-221-000
TITL: RADIATION EFFECT ON GAAS INTERFACE (U), 67 P., (U)
TREE: 310

.block

24031

.endblock

.block

copy: 1 id: 56368-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24082
ADNO: C005411
AUTH: MURPHY J.E. ; CURRISTON L.E. ; HORIO S.P.
CLSS: SRD
CONN: F 04701 75 C 0174
CORP: ROCKWELL INTERNATIONAL CORP. (DOWNEY, CA)
DATE: 7511
DESC: Nuclear Warfare Strategic systems defense howitzer casaba L1
DESC: Directed Energy Weapons Lasers Overviews L1
DESC: TABULAR
REPN: SAMSO TR 75 273 VOL. 1 ; SD 75 SA 0140 1
SUJO: 3-423-800 ; 3-610-100
TEMP: B1980
TITL: ADVANCED RADIATION SPACE DEFENSE APPLICATION STUDY; VOL. 1,
EXECUTIVE SUMMARY (U), 88 P., (SRD)

.block

24082

.endblock

.block

copy: 1 id: 56411-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24092
ABS: Methods and procedures are presented for estimating nuclear weapon effects pertinent to hardened structures and for designing and analyzing such structures subjected to these effects. Weapon yields considered range from kiloton through multi-megaton size. Overpressure levels which may be treated range from thousands of psi to less than 5 psi. The free-field environments covered include airblast, cratering and ejecta, ground shock, and radiation.

ADNO: A955183
AUTH: CRAWFORD R.E. ; HIGGINS C.J. ; BULTMANN E.H. JR.
CLSS: U
CONN: F 29601 74 C 0018
CORP: CIVIL NUCLEAR SYSTEMS CORP. (ALBUQUERQUE, NM)
DATE: 7410
DESC: Nuclear Weapon Effects structures underground L1
DESC: Nuclear Weapon Effects structures aboveground L1
DESC: HANDBOOK

DESC: Nuclear Weapon Environment Summaries L1
DESC: Nuclear Weapon Effects structures hard launch sites L1
REPN: AFWL TR 74 102
SUJO: 1-000-000 ; 3-116-000 ; 3-250-000 ; 3-260-000
TITL: AIR FORCE MANUAL FOR DESIGN AND ANALYSIS OF HARDENED STRUCTURES
(U), 1216 P., (U)

TNFF: 5605

.block

24092

.endblock

.block

copy: 1 id: 56421-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24110

AUTH: BIEN F.

CLSS: U

CONN: F 19628 74 C 0204

CORP: AERODYNE RESEARCH, INC. (BEDFORD, MA)

DATE: 7511

DESC: EXPERIMENTAL

DESC: Composition Chemistry Atmosphere Reaction Rates L1

DESC: Simulation Facilities Techniques EM propagation atmospheric
chemistry high-altitude phenomenolgy L1

DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1

DESC: test instruments IR L1

DESC: test instruments EM propagation atmospheric chemistry plasma
ionospheric diagnostics L1

REPN: AFCRL TR 75 0619 ; ARI RR 73

SUJO: 4-220-000 ; 4-325-000 ; 4-383-000 ; 4-820-600 ; 5-400-000

TITL: EXPERIMENTAL MEASUREMENT OF NO+ RADIATIVE LIFETIME (U), 53 P., (U)

.block

24110

.endblock

.block

copy: 1 id: 56433-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24123

ADNO: 920771L

AUTH: DILLON L. JR.

CLSS: U

CONN: F 33315 72 C 2110

CORP: RCA, ADVANCED TECHNOLOGY LABS. (CAMDEN, NJ)

DATE: 7404

DESC: THEORY EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic subsystems computers memory L1

EFFT: TREE

REPN: AFAL TR 74 152

SUJO: 3-212-000
TITL: RADIATION HARDENED MIS INPUT/OUTPUT SUBSYSTEM DEVELOPMENT (U), 83
P., (U)

TREE: 325 ; 341 ; 430

.block

24123

.endblock

.block

copy: 1 id: 56445-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24175

ABS: This report contains methods for reducing the collateral damage from use of tactical nuclear weapons. The cumulative effect of "safe-siding" in selecting targets and weapons typically can result in a choice of weapon yield 10 times as large as needed to achieve the desired tactical objective. Target size may be overestimated to compensate for inadequate target intelligence : doubling the target radius can increase the nuclear yield required more than tenfold. The amount of damage that will achieve the desired tactical military objective should be a determining factor in weapon selection. So-called light damage on a tank may be adequate in many tactical situations. Radiation effects should be considered, since basing yield selection on blast effects alone tends to require larger yields.

ABS: Weapon employment should reflect the military situation, rather than "cookbook" rules based on engineering definitions of damage. Improved target acquisition methods and precision guidance can permit use of low-yield and nonnuclear weapons. Future weapon developments should take account of these target and weapon selection factors.

ADNO: B010169L

AUTH: WEINER M.G.

CLSS: U

CONN: DAHC 15 73 C 0181

CORP: RAND CORP. (SANTA MONICA, CA)

DATE: 7308

DESC: Nuclear Warfare Theater collateral damage bonus damage L1

DESC: SUMMARY

REPN: R 1355 ARPA

SUJO: 3-412-500

TITL: SOME PRELIMINARY CONCLUSIONS OF THE ARPA COLLATERAL-DAMAGE STUDIES
(U), 22 P., (U)

TNFF: 4820

.block

24175

.endblock

.block

copy: 1 id: 56473-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24177

ABS: The nuclear vulnerability of fifteen selected passive IR optical components has been investigated. These included five refractors (Si, GE, ZnS, ZNSE, CDTE), three multilayer filters, four infrared mirrors (bare beryllium, electroless nickel-plated beryllium, aluminized fused silica), and three baffles (anodized beryllium, anodized aluminum, black velvet paint). The principal optical measurements performed before and after irradiation were specular transmittance or reflectance over a spectral range of from 1 to 31 um and diffuse transmittance or reflectance at 10.6 um as a function of angle from the specular direction. Nitrogen-cooled transparent components were taken to be internal components and were exposed to three radiation sources. The nature and magnitude of the radiation-induced degradation of the optical properties of these elements is presented. (author)

ADNO: 526441L

AUTH: PASSENHEIM B.C.

CLSS: SRD

CONN: F 04701 71 C 0334

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7303

DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1

DESC: THEORY EXPERIMENTAL

EFFT: X-RAY ; TREE

REPN: SAMSO TR 73 180 VOL. 1 ; GULF RT C 11136 VOL. 1

SUJO: 3-224-000

TEMP: B2151

TITL: NUCLEAR VULNERABILITY ASSESSMENT OF SENSOR COMPONENTS; VOL. 1,
PASSIVE COMPONENTS (U), 148 P., (SRD)

TREE: 361

.block

24177

.endblock

.block

copy: 1 id: 56475-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24259

AUTH: LOWEN R.W. ; SMITH C.A.

CLSS: U

CCDE: ROSCOE

CONN: DNA 001 74 C 0182 ; DNA 001 74 C 0147

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)

DATE: 7506

DESC: TABULAR CODE

DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L5 MODEL INPUT FOR ROSCOE

REPN: SAI 75 609 LJ VOL. 3

SUJO: 5-800-000

TITL: ATMOSPHERIC, GEOMAGNETIC, AND HIGH-ALTITUDE ENERGY-DEPOSITION AND
NEUTRAL-PARTICLE-MOTION MODELS FOR ROSCOE; VOL. 3, AMBIENT

GEOMAGNETIC FIELD (MODEL 2) (U), 64 P., (U)

.block

24259

.endblock

.block

copy: 1 id: 56536-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24309

ADNO: A011765

AUTH: JOHNSTON R.R.

CLSS: U

CCDE: ALCHEM (AIR CHEMISTRY) SAI

CONN: N 00014 74 C 0360

CORP: SCIENCE APPLICATIONS, INC. (PALO ALTO, CA)

DATE: 7411

DESC: Nuclear Weapon Environment Induced Electromagnetic Pulse EMP L1

DESC: THEORY

DESC: Nuclear Weapon Phenomenology ionization mechanisms chemistry initial

gamma L1

EMPF: 251

REPN: SAI 072 626 PA

SUJO: 2-312-200 ; 2-510-000

TITL: NON-EQUILIBRIUM CONDUCTIVITY OF AIR INDUCED BY IONIZING RADIATION

(U), 36 P., (U)

.block

24309

.endblock

.block

copy: 1 id: 56580-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24371

ADNO: B006864L

AUTH: CHODOROW A.M. ; HILL J.R.

CLSS: U

CCDE: EDRIVER (CABLE COUPLING -SOURCE REGION) MRC

CONN: F 29601 74 C 0089

CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)

DATE: 7509

DESC: Nuclear Weapon Effects electrical mechanical cables wires L1

DESC: THEORY TABULAR

EFFT: EMP ; TREE

EMPF: 388

REPN: AFWL TR 74 334

SUJO: 3-231-000

TITL: RADIATION-INDUCED CURRENTS IN COAXIAL TRANSMISSION LINES (U), 104

P., (U)

.block

24371

.endblock

.block

copy: 1 id: 56632-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24525
AUTH: POWELL R.J.
CLSS: U
CONN: F 19628 74 C 0132
CORP: RCA LABS. (PRINCETON, NJ)
DATE: 7507
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFCRL TR 75 0485 ; PRRL 75 CR 48
SUJO: 3-222-000
TITL: RADIATION AND CHARGE INJECTION IN A1203 USING NEW TECHNIQUES (U), 27
P., (U)
TREE: 200 ; 325

.block

24525

.endblock

.block

copy: 1 id: 56755-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24603
CLSS: U
CORP: ATOMIC ENERGY COMMISSION, NEVADA OPERATIONS OFFICE (LAS VEGAS, NV)
DATE: 7310
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
external L1 239-PU 137-CS 90-SR 60-CO 241-AM
DESC: ENEWETAK ; EXPERIMENTAL SUMMARY
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic external
L1
DESC: Nuclear Weapon Effects ecological L1
REPN: NVO 140 VOL. 1
SUJO: 3-312-210 ; 3-332-210 ; 3-341-000
TITL: ENEWETAK RADIOLOGICAL SURVEY; VOL. 1 (U), 736 P., (U)

.block

24603

.endblock

.block

copy: 1 id: 56825-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24604
CLSS: U
CORP: ATOMIC ENERGY COMMISSION, NEVADA OPERATIONS OFFICE (LAS VEGAS, NV)

DATE: 7310
DESC: ENEWETAK ; EXPERIMENTAL SUMMARY
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic external
L5
DESC: Nuclear Weapon Effects ecological L5
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
external L1 239-PU 137-CS 90-SR 60-CO 241-AM
REPN: NVO 140 VOL. 2
SUJO: 3-312-210 ; 3-332-210 ; 3-341-000
TITL: ENEWETAK RADIOLOGICAL SURVEY; VOL. 2 (U), CA. 600 P., (U)

.block

24604

.endblock

.block

copy: 1 id: 56826-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24605
CLSS: U
CORP: ATOMIC ENERGY COMMISSION, NEVADA OPERATIONS OFFICE (LAS VEGAS, NV)
DATE: 7310
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic external
L5

DESC: ENEWETAK ; EXPERIMENTAL SUMMARY
DESC: Nuclear Weapon Effects ecological L5
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
external L1 239-PU 137-CS 90-SR 60-CO 241-AM
REPN: NVO 140 VOL. 3
SUJO: 3-312-210 ; 3-332-210 ; 3-341-000
TITL: ENEWETAK RADIOLOGICAL SURVEY; VOL. 3 (U), CA. 700 P., (U)

.block

24605

.endblock

.block

copy: 1 id: 56827-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24649
AUTH: RANDERSON D. ; CORNETT J.S.
CLSS: U
CONN: SF 54 351
CORP: NOAA, ENVIRONMENTAL RESEARCH LAB. (LAS VEGAS, NV)
DATE: 7305
DESC: Environmental Conditions at Nuclear Weapon Test Site weather L1 NTS
NOT LITERALLY AT TEST TIME BUT OF INTEREST TO FALLOUT TRANSPORT
REPN: NOAA TM ERL ARL 37 ; COM 74 10799
SUJO: 4-841-000
TITL: NUMERICAL PREDICTION OF THE MESOSCALE TRANSPORT OF ATMOSPHERIC
EFFLUENTS--PHILOSOPHY AND MORPHOLOGY OF EXPERIMENTAL MODELS FOR
PREDICTING THE WIND AND POTENTIAL RADIOLOGICAL FIELDS OVER THE

NEVADA TEST SITE (U), 63 P., (U)

.block

24649

.endblock

.block

copy: 1 id: 56867-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 24818

ABS: In using tactical nuclear weapons (TNWS), it is important to know the distance from Ground Zero to which a particular weapon can cause nuclear radiation intense enough to inflict casualties. This information should be in easily understood form and should show how the height of burst (HOB) affects the radiation environment. This report presents curves for many of the TNWS now in stockpile and planned, showing the initial radiation dose as a function of HOB and distance from Ground Zero. These curves are in a format like that of the well-known airblast overpressure curves. The detailed results of many individual two-dimensional radiation transport calculations have been synthesized to develop analytical formulas that can be used to calculate the dose (rad tissue) that targets on the earth's surface receive.

AUTH: DOWLER T.W. ; SANDMEIER H.A.

CLSS: SRD

CONN: W 7405 ENG 36

CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM)

DATE: 7311

DESC: Nuclear Weapon Environment Prompt Neutron source strength total fluence L1

DESC: Nuclear Weapon Environment Initial Gamma source strength total intensity L1

DESC: TABULAR

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1

DESC: Nuclear Warfare Theater operations scenarios battlefield environment L1

REPN: LA 5388

TSHO: SURFACE ; LOW-ALT

SOCE: W-25 ; W-30 ; W-31 ; W-48 ; S33 ; W-50 ; W-52 ; W-54 ; B-57 BOMB ; W-72 ; W-74

SUJO: 1-110-000 ; 1-710-000 ; 3-312-100 ; 3-411-200

TEMP: A9451

TITL: RADIATION ENVIRONMENTS FROM TACTICAL NUCLEAR WEAPONS (U), 19 P., (SRD)

TNFF: 4850

TREE: 910 ; 920

.block

24818

.endblock

.block

copy: 1 id: 56989-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 25173
AUTH: CHODOROW A.M. ; HILL J.R. ; TRYBUS P.R.
CLSS: U
CONN: F 29601 74 C 0089
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7411
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
DESC: TABULAR
EFFT: IEMP ; TREE
EMPF: 392
REPN: AMRC R 33
SUJO: 3-231-000
TITL: TRANSMISSION LINE AND PHOTOCONDUCTIVITY EFFECTS IN COAXIAL CABLES
EXPOSED TO IONIZING RADIATION (U), 26 P., (U)
TREE: 390

.block

25173

.endblock

.block

copy: 1 id: 57251-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 25177
AUTH: CHODOROW A.M. ; HILL J.R.
CLSS: U
CCDE: EDRIVER (IEMP) MRC
CONN: F 29601 74 C 0089
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7410
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
DESC: THEORY
EFFT: X-RAY ; IEMP ; TREE
EMPF: 392 ; 399
REPN: AMRC R 31
SUJO: 3-231-000
TITL: PARAMETER STUDIES OF RADIATION INDUCED CHARGE TRANSFER IN COAXIAL
CABLES (U), 45 P., (U)
TREE: 390

.block

25177

.endblock

.block

copy: 1 id: 57254-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 25271
AUTH: CHODOROW A.M. ; HILL J.R.
CLSS: U

CCDE: EDRIVER (CABLE-PHOTON COUPLING) MRC
CONN: F 29601 74 C 0089
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7411
DESC: THEORY TABULAR
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: IEMP ; TREE
EMPF: 392 ; 399
REPN: AMRC R 41
SUJO: 3-231-000
TTTL: RADIATION-INDUCED CURRENTS IN COAXIAL TRANSMISSION LINES (U), 104
P., (U)
TREE: 390

.block

25271

.endblock

.block

copy: 1 id: 57326-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 25349
AUTH: TRUBEY D.K. ; ROUSSIN R.W. ; GURNEY J. ; GUSTIN A.B.
CLSS: U
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7403
DESC: Cross Sections neutron L1
DESC: Radiation Transport neutron L1
DESC: Radiation Transport gamma L1
DESC: Cross Sections gamma L1
DESC: BIBLIOGRAPHY
REPN: ORNL RSIC 5 (VOL. 4)
SUJO: 9-620-000 ; 9-650-000 ; 9-820-000 ; 9-830-000
TTTL: BIBLIOGRAPHY, SUBJECT INDEX, AND AUTHOR INDEX OF THE LITERATURE
EXAMINED BY THE RADIATION SHIELDING INFORMATION CENTER (REACTOR AND
WEAPONS RADIATION SHIELDING) (U), CA. 500 P., (U)
TREE: 150 ; 410 ; 950

.block

25349

.endblock

.block

copy: 1 id: 57388-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 25388
ABS: This report discusses the merits of enhanced radiation weapons as
alternatives to fission weapons in exemplar battlefield attacks.
warheads are
compared in terms of the number of civilian and military fatalities,
and, amount of equipment and structural damage inflicted. The
principal findings are: (1) for approximately the same level of

military casualties against selected battlefield targets, ER weapons offer prospects for significant reductions in collateral civilian casualties and very major reductions in structural damage to built-up areas; (2) modest civil defense measures to provide radiation shielding can substantially reduce civilian casualties if ER weapons are used; and (3) by raising the burst height of ER weapons and accepting a small consequent decrease in effectiveness, severe damage to urban structures can be avoided.

ABS: When urban populations evacuate ahead of hostilities, by using an even higher burst, enemy forces occupying these areas can be attacked with ER weapons without causing significant structural damage.

ADNO: C001462
AUTH: COHEN S.T. ; HANUNIAN N.A.
CLSS: SRD
CONN: DAHC 15 73 C 0181
CORP: RAND CORP. (SANTA MONICA, CA)
DATE: 7503
DESC: Nuclear Warfare Theater collateral damage bonus damage L1
DESC: TABULAR
REPN: R 1670 ARPA
SUJO: 3-412-500
TEMP: B1439
TITL: COMPARISON OF THE COLLATERAL DAMAGE FROM THE USE OF ENHANCED RADIATION AND FISSION WEAPONS IN THE BATTLEFIELD AREA (U), 46 P., (SRD)

TNFF: 4805 ; 4820

.block

25388

.endblock

.block

copy: 1 id: 57400-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 25433
ADNO: B008577L
AUTH: BUTCHER D.T.
CLSS: U
CONN: F 19628 75 C 0185
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)
DATE: 7510
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: AFCRL TR 75 0569 ; C75 969 501
SUJO: 3-222-000
TITL: RADIATION HARDENED MOS VOLTAGE COMPARATOR (U), 46 P., (U)
TREE: 325

.block

25433

.endblock

.block

copy: 1 id: 57424-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 25770
ADNO: B017227L
CLSS: U
CORP: ROCKWELL INTERNATIONAL (LOS ANGELES, CA)
DATE: 7309
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: EXPERIMENTAL SURVEY
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: TFD 72 1257 VOL. 2
SUJO: 3-212-000 ; 3-221-000 ; 3-222-000
TITL: SUMMARY OF COMPONENT RADIATION TESTS PERFORMED DURING FISCAL YEAR
1973; VOL. 2 (U), CA. 200 P., (U)
TREE: 310 ; 320 ; 343

.block
25770
.endblock
.block

copy: 1 id: 57657-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 25842
AUTH: LIMBERG W.
CLSS: U
CORP: ERNST MACH INSTITUT (FREIBURG, GERMANY)
DATE: 7408
DESC: REPORT IN GERMAN
DESC: test instruments nuclear radiation beta electron beams L1 ELECTRON
SPECTROMETER

REPN: BERICHT 4 74
SUJO: 4-344-000
TITL: MAGNETICAL ENERGY ANALYZER FOR SLOW ELECTRONS (U), 50 P., (U)
.block
25842
.endblock
.block

copy: 1 id: 57695-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 25875
AUTH: WILSON M.R. ; BAKER T.C.
CLSS: U
CONN: F 29601 74 C 0089

CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7408
DESC: THEORY
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: IEMP ; TREE
EMPF: 392
REPN: AMRC N 25
SUJO: 3-231-000
TITL: CALCULATIONS OF RADIATION INDUCED CHARGE TRANSFER IN COAXIAL CABLES
(U), 21 P., (U)
TREE: 390

.block
25875
.endblock

.block
copy: 1 id: 57705-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 26287
ADNO: A044347
CLSS: U
CORP: ARMY ENGINEER WATERWAYS EXPERIMENT STATION (VICKSBURG, MS)
DATE: 7301
DESC: Simulation Facilities Techniques nuclear radiation fallout
simulation L5
DESC: EXPERIMENTAL SUMMARY
REPN: AEWES MP 0 73 1
SHOT: TRINIDAD
TSHO: SURFACE
SUJO: 4-242-000
TITL: ENGINEERING AND SCIENTIFIC RESEARCH AT WES (U), 4 P., (U)

.block
26287
.endblock

.block
copy: 1 id: 58005-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 26385
AUTH: PARKINSON J.B.
CLSS: SRD
CONN: F 29601 71 C 0027
CORP: AEROJET ELECTROSYSTEMS CO. (AZUSA, CA)
DATE: 7303
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: Nuclear Weapon Environment Ultraviolet Output rate L1
DESC: THEORY EXPERIMENTAL
EFFT: X-RAY ; TREE
REPN: AFWL TR 73 8

TSHO: HI-ALT ; MULTIPLE
SUJO: 1-540-000 ; 3-133-000
TEMP: A3281
TITL: GUIDELINES FOR THE DESIGN OF RADIATION HARDENED SPACE SENSORS (U),
84 P., (SRD)
TREE: 361

.block
26385
.endblock
.block

copy: 1 id: 58082-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 26736
AUTH: VERRELLI D.M. ; STROMBERG L.R. ; CABLE J.W.
CLSS: U
CORP: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE
DATE: 7507
DESC: Nuclear Weapon Effects on animals ionizing radiation L1
DESC: TABULAR
SUJO: 3-312-000
SYMJ: PROCEEDINGS, 34TH MILITARY OPERATIONS RESEARCH SYMPOSIUM (U),
(SECRET REPORT)
TITL: BIOLOGICAL EFFECTS OF SUPRALETHAL RADIATION (U), 4 P., (U)

.block
26736
.endblock
.block

copy: 1 id: 58359-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 26968
AUTH: ROTOLANTE R.A. ; REINE M.B. ; HALPERT H.
CLSS: S
CORP: HONEYWELL RADIATION CENTER (LEXINGTON, MA)
DATE: 7304
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: THEORY EXPERIMENTAL
EFFT: TREE
REPN: AMMRC CTR 73 15
SUJO: 3-133-000
TEMP: A4209
TITL: CIRCUMVENTION TECHNIQUES FOR PHOTOCONDUCTORS (U), CA. 100 P., (S)
TREE: 361 ; 420

.block
26968
.endblock
.block

copy: 1 id: 58560-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 26969
AUTH: ROTOLANTE R.A. ; MUROSAKO R.P. ; KEISER G.E.
CLSS: S
CONN: DAAG 46 73 C 0202
CORP: HONEYWELL RADIATION (LEXINGTON, MA)
DATE: 7312
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: TREE
REPN: AMMRC CTR 73 46
SUJO: 3-133-000
TEMP: A4697
TITL: RADIATION EFFECTS IN INTRINSIC PHOTODETECTOR SYSTEMS (U), 110 P.,
(S)
TREE: 361 ; 420

.block
26969
.endblock
.block

copy: 1 id: 58561-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 26976
CLSS: U
CORP: ARMY NUCLEAR AGENCY (FT. BLISS, TX)
DATE: 7505
DESC: TABULAR SUMMARY
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
REPN: NUCLEAR NOTE 3
SUJO: 3-312-100
TITL: NEW NUCLEAR RADIATION CASUALTY CRITERIA (U), 10 P., (U)

.block
26976
.endblock
.block

copy: 1 id: 58566-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 27308
ABS: Past considerations of nuclear war, particularly those involving
battlefield use, have not taken into account a major factor: the
time-dependent nature of the human body's response to radiation.
This factor is likely to introduce changes in the temporal nature of
warfare as profound as the spatial changes associated with the
increased explosive power of nuclear munitions. High fatality rates

will last for days following a nuclear event and must be taken into account. Continued lack of attention to this aspect of nuclear warfare is likely to result in inappropriate choices of military posture, doctrine, and equipment.

AUTH: GUSTAVSON M.R.
CLSS: U
CONN: W 7405 ENG 48
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA)
DATE: 7404
DESC: Nuclear Weapon Effects on animals ionizing radiation L1
DESC: Nuclear Warfare Theater operations scenarios threats L1
DESC: THEORY
REPN: UCRL 51572
SUJO: 3-312-000 ; 3-411-100
TITL: TIME DISTORTION IN NUCLEAR WAR (U), 8 P., (U)
TNFF: 4810

.block
27308
.endblock
.block

copy: 1 id: 58811-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 27351

ABS: There appears to have been a tendency by U.S. Military analysts to treat the matter of initial nuclear radiation dosages: for battlefield Nuclear Operations: in relatively narrow terms. The major emphasis has been placed on dosage criteria for the production of a specified reduction in combat effectiveness, for relevant military tasks, within a given period after exposure. This has taken the form of determining a single dosage to describe the radiobiological effectiveness of a tactical nuclear weapon. The requirement for this dosage is that it produces a severe performance degradation within a short time after exposure and that the effect represents a specific human response: i.e., permanent combat ineffectiveness. Such factors as transient incapacitation; delayed casualties and fatalities; less than severe performance degradation;

ABS: and performance degradation resulting from synergistic relationships between weapon effects have not been given serious or adequate attention. Moreover, and this perhaps represents the key deficiency, this requirement has been analyzed with but little regard to the relationship between exposed personnel and the operational environment in which they may operate. In this respect, the assessment of U.S./NATO attacks on Soviet/Warsaw Pact units has been essentially a mirror-imaging process where the results of such attacks have been predicated around our view of the other side's capabilities rather than how the other side may view them: based on his doctrine, strategy, and plans. This seems fallacious.

AUTH: COHEN S.T.
CLSS: U
CORP: RAND CORP. (SANTA MONICA, CA)
DATE: 7501

DESC: Nuclear Warfare Theater operations scenarios battlefield environment
L1

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L5
REPN: P 5332
SUJO: 3-312-100 ; 3-411-200
TITL: ON THE STRINGENCY OF DOSAGE CRITERIA FOR BATTLEFIELD NUCLEAR
OPERATIONS (U), 22 P., (U)
TNFF: 5500

.block
27351
.endblock
.block

copy: 1 id: 58841-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 27407
CLSS: U
CORP: ARMY SAFEGUARD COMMUNICATIONS AGENCY (FT. HUACHUCA, AZ)
DATE: 7310
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: EXPERIMENTAL
EFFT: TREE
SUJO: 3-221-000
TITL: RADIATION TESTS OF TRANSZORB ELECTRICAL SURGE ARRESTOR DEVICES (U),
22 P., (U)
TREE: 310

.block
27407
.endblock
.block

copy: 1 id: 58885-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 27409
AUTH: HAWTHORNE H.A. ; ZELLMER S.D. ; EBERHARDT L.L. ; THOMAS J.M.
CLSS: U
CONN: AT(04 1) GEN 12 ; AT(45 1) 1830
CORP: UNIVERSITY OF CALIFORNIA (LOS ANGELES, CA) ; BATTELLE PACIFIC
NORTHWEST LABS. (RICHLAND, WA)
DATE: 7500
DESC: Nuclear Weapon Effects on plants ionizing radiation chronic uptake
L1 ALFALFA DAIRY CATTLE MILK SR90 CS137
DESC: EXPERIMENTAL
SUJO: 3-332-220
SYMJ: HEALTH PHYSICS, VOL. 30
TITL: CESIUM CYCLING IN A UTAH DAIRY FARM (U), 18 P., (U)

.block
27409
.endblock

.block

copy: 1 id: 58887-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 27435
AUTH: NOTTHOFF J.K.
CLSS: U
CORP: MCDONNELL DOUGLAS ASTRONAUTICS CO-WEST (HUNTINGTON BEACH, CA)
DATE: 7305
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: MDC G3893
SUJO: 3-222-000
TITL: RADIATION-HARDENED OPERATIONAL AMPLIFIER DEVELOPMENT (U), 97 P., (U)
TREE: 320 ; 430

.block

27435

.endblock

.block

copy: 1 id: 58905-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 27645
CLSS: NATO C
CORP: NATO INTERNATIONAL STAFF, DEFENCE SUPPORT DIV.
DATE: 7512
DESC: Simulation Facilities Techniques nuclear radiation L1
DESC: Simulation Facilities Techniques thermal optical L1
DESC: HANDBOOK
DESC: Simulation Facilities Techniques blast shock L1
DESC: Simulation Facilities Techniques electronic vulnerability L1
EMPF: 701
REPN: AEP 9
SUJO: 4-210-000 ; 4-240-000 ; 4-270-000 ; 4-280-000
TITL: NATO MANUAL OF SIMULATORS OF NUCLEAR WEAPONS EFFECTS
TREE: 642

.block

27645

.endblock

.block

copy: 1 id: 59100-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 28056
AUTH: HETTICHE L.R. ; METZ S.A. ; EVANGELIDES J.S. ; COOPERSTEIN G.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7406
DESC: Nuclear Weapon Effects materials composites L1
DESC: EXPERIMENTAL
EFFT: X-RAY
REPN: NRL R 7730
SUJO: 3-249-000
TITL: RESPONSE OF BORON-ALUMINUM COMPOSITE MATERIALS TO PULSED RADIATION
HEATING (U), 52 P., (U)

.block
28056
.endblock

.block
copy: 1 id: 59404-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 28519
ADNO: C017820L
CLSS: SRD
CONN: DAHC 60 71 C 0005
CORP: MARTIN MARIETTA AEROSPACE (ORLANDO, FL)
DATE: 7407
DESC: Nuclear Weapon Effects electronic subsystems guidance control L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Effects missile systems ABM electronics L1
EFFT: TREE
REPN: OR 12,977
SUJO: 3-112-230 ; 3-211-000
SYST: SPRINT I
TEMP: B7091
TITL: SPRINT I MISSILE FLIGHT CONTROL SYSTEM NUCLEAR RADIATION HARDENING
ANALYSIS (U), 483 P., (SRD)
TREE: 392 ; 342

.block
28519
.endblock

.block
copy: 1 id: 59802-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 28825
AUTH: CHESTER R.O.
CLSS: U
CCDE: YIELDS (BIOLOGICAL DOSE) ORNL
CONN: W 7405 ENG 26
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7412
DESC: Nuclear Weapon Environment radiation decay L1
DESC: THEORY CODE
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1

REPN: ORNL 4996
SUJO: 2-223-400 ; 3-312-220
TITL: BIOLOGICAL DOSE AND RADIOLOGICAL ACTIVITY FROM NUCLEAR REACTOR OR
NUCLEAR WEAPON FISSION PRODUCTS (U), 90 P., (U)

.block

28825

.endblock

.block

copy: 1 id: 60034-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 29642

CLSS: U

CONN: E (26 1) 410

CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO., INC. (LAS VEGAS, NV)

DATE: 7510

DESC: TABULAR

DESC: Nuclear Weapon Test safety L1

REPN: NVO 410 31

SUJO: 4-856-000

TITL: OPERATION BEDROCK; ONSITE RADIOLOGICAL SAFETY REPORT, JULY 1974
THROUGH JUNE 1975 (U), 30 P., (U)

.block

29642

.endblock

.block

copy: 1 id: 60598-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 29665

AUTH: EUBANK B.F. ; MULLEN O.W.

CLSS: U

CONN: AT (26 1) 410

CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO., INC. (LAS VEGAS, NV)

DATE: 7408

DESC: SUMMARY

DESC: Nuclear Weapon Test safety L1

REPN: NVO 410 27

TSHO: UG-CONTAINED

SUJO: 4-856-000

TITL: OPERATION ARBOR, ONSITE RADIOLOGICAL SAFETY REPORT; JULY 1973
THROUGH JUNE 1974 (U), 20 P., (U)

.block

29665

.endblock

.block

copy: 1 id: 60611-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 29666
AUTH: MULLEN O.W. ; EUBANK B.F.
CLSS: U
CONN: AT (26 1) 410
CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO., INC. (LAS VEGAS, NV)
DATE: 7405
DESC: SUMMARY
DESC: Nuclear Weapon Test safety L1
REPN: NVO 410 25
TSHO: UG-CONTAINED
SUJO: 4-856-000
TTTL: OPERATION TOGGLE, ONSITE RADIOLOGICAL SAFETY REPORT; JULY 1972
THROUGH JUNE U973 (U), 25 P., (U)

.block

29666

.endblock

.block

copy: 1 id: 60612-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 29945
AUTH: CONARD R.A.
CLSS: U
CONN: AT (30 1) 16
CORP: BROOKHAVEN NATIONAL LAB. (UPTON, NY)
DATE: 7400
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic L1
DESC: SURVEY
DESC: Nuclear Weapon Effects social psychological L5
EFFT: GAMMA ; BETA
REPN: BNL 50424
SHOT: BRAVO
TSHO: SURFACE
SUJO: 3-312-200 ; 3-344-000
TTTL: TWENTY-YEAR REVIEW OF MEDICAL FINDINGS IN A MARSHALLESE POPULATION
ACCIDENTALLY EXPOSED TO RADIOACTIVE FALLOUT (U), 154 P., (U)

.block

29945

.endblock

.block

copy: 1 id: 60793-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 30308
ABS: The overall objective of this study was to develop a series of
designs of highly expedient field fortifications capable of
resisting the effects of nuclear weapons. The fortifications were to
be designed based on current literature and to involve no testing
during the design phase. They were to hold from one to twelve men
and be used as troop billets, command posts, logistical storage

facilities, and aid stations. The assumed weapons threat was that of a 10-kt weapon at any orientation. The fortifications were to provide protection to the extent that the combat effectiveness of the protected personnel would be unimpaired for 12 to 24 hours after attack. Three types of shelters were developed. These were: 1. Trench shelters.

ABS: This open-trench-type shelter with or without overhead cover is designed primarily for one-or two-man occupancy and construction using only hand tools and locally available raw materials. Three designs, a covered offset foxhole, a covered foxhole, and a basic foxhole, were developed. 2. Open shelters. These shelters are open to the atmosphere, hastily constructed, and large enough for six-to ten-man occupancy. They are constructed primarily using hand tools and require some specially fabricated components. Three designs were developed to resist an overpressure of 30 psi and two to resist an overpressure of 15 psi. 3. Closed shelters. These shelters are closed off from the blast wave and are of quite deliberate construction with blast-resistant hatches, etc. They are large enough for six to eight men and are constructed using primarily hand tools.

ABS: They generally require specially fabricated components. Three designs were developed to resist an overpressure of 100 psi. Analysis procedures for predicting airblast pressures and radiation levels inside the shelters are given in Appendix A. Construction drawings are given in Appendix B. Some testing of components of the designs was conducted, and the results are given in Appendix C. Appendix D gives details of two ventilators that can possibly be used with the shelters.

ADNO: 923320L
AUTH: KENNEDY T.E. ; BALL J.W. ; HOOT B.B. ; RIECK P.J.
CLSS: U
CORP: ARMY ENGINEER WATERWAYS EXPERIMENT STATION (VICKSBURG, MS)
DATE: 7409
DESC: Nuclear Warfare Theater systems defense systems countermeasures L1
DESC: TABULAR
REPN: AEWES TR N 74 7
SUJO: 3-413-600
TITL: EXPEDIENT FIELD FORTIFICATIONS FOR USE AGAINST NUCLEAR WEAPONS (U),
220 P., (U)
TNFF: 5602

.block
30308
.endblock
.block

copy: 1 id: 61042-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 30328
AUTH: LYNCH O.D.T. JR. ; MCGRAW T.F. ; NELSON V.A. ; MOORE W.E.
CLSS: U
CORP: ATOMIC ENERGY COMMISSION (LAS VEGAS, NV) ; UNIVERSITY OF WASHINGTON
LABORATORY OF RADIATION ECOLOGY (SEATTLE, WA) ; ENVIRONMENTAL

PROTECTION AGENCY (LAS VEGAS, NV)

DATE: 7502
DESC: Nuclear Weapon Environment Fallout isotope concentrations L1
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects ecological L1
REPN: ERDA 34 ; UC 41
SUJO: 2-223-100 ; 3-341-000
TITL: RADIOLOGICAL RESURVEY OF FOOD, SOIL, AIR AND GROUNDWATER AT BIKINI
ATOLL, 1972 (U), 33 P., (U)

.block

30328

.endblock

.block

copy: 1 id: 61058-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 30565

ABS: This "manual" is a detailed and original work devoted to fundamental medical questions relating to protecting the population from radiation. This book was written by a team of scientists. They are all outstanding specialists in the field of radiobiology and radiation medicine. This fact explains the high scientific and theoretical level at which the questions examined are dealt with. This book is intended for a wide range of medical personnel and specialists in other fields of science, including medical students and biologists. It throws light on and interprets the theoretical and practical aspects of radiation medicine taking into account the latest scientific achievements in the field of radiobiology and radiation medicine. Concise information is given on the physics of ionizing radiation.

ABS: Fundamental units of measurement are given for radiation monitoring, as well as units of radioactivity and methods of measuring ionizing radiation, and a description is given of interaction between ionizing radiation and biological tissue, and of reactions of nucleus division and synthesis. A description is given of the structural principles of atomic weapons. In this book a description is given of the biological effect of penetrating radiation on the body of man and animals and of the pattern of restorative processes. It also deals with ways of approaching substantiation of maximum permissible radiation doses, taking into account the use of medical protective agents which increase the body's resistance to the harmful effect of radiation.

ABS: In this "manual" are presented the fundamental principles of biological protection and of local protection of individual radiosensitive organs and tissues. A description is given of the clinical pattern of acute radiation sickness and of combined types of radiation injury. The principles are given for prevention and therapy of acute radiation sickness and of combined injury, as well as new principles of classification. An outline is given for treating those afflicted. This section of the book is of special value to the practicing physician. In the extreme situation exposure to radioactive materials either through contact or internally will

as a rule be accompanied by external gamma exposure of the human body. Here in the overwhelming majority of cases external gamma exposure will be the leading and determining factor in forming the structure of radiation injuries.

ABS: But in some situations injuries to the skin from products of the nuclear explosion can turn out to be leading factors in the structure of radiation injuries. Therefore, a special chapter has been devoted to prevention and therapy of injuries from radiation products of an atomic blast.

ADNO: B024572L

AUTH: IL"IN L.A. ; VOROB"YEV A.I.

CLSS: U

CORP: AIR FORCE SYSTEMS COMMAND, FOREIGN TECHNOLOGY DIV. (WRIGHT-PATTERSON AFB, OH)

DATE: 7500

DESC: Nuclear Weapon Effects on animals thermal burns heating L5

DESC: SURVEY

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1

DESC: Nuclear Weapon Effects on animals blast shock pressure L5

DESC: Nuclear Weapon Effects on animals integrated effects L1

REPN: FTD ID(RS) T 1509 77

SUJO: 3-311-100 ; 3-312-100 ; 3-313-100 ; 3-315-000

TITL: MANUAL OF MEDICAL QUESTIONS RELATING TO PROTECTION FROM RADIATION (U), 124 P., (U)

TNFF: 5602

.block

30565

.endblock

.block

copy: 1 id: 61270-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 30612

ABS: SAM survivability is presented for (1) anti-radiation missile (ARM) attack at both low and medium altitude and (2) against low altitude bombing attack. A methodology was developed to evaluate SAM site survivability under a variety of conditions against a low altitude bombing attack by aircraft employing conventional ordnance. Among the parameters varied were visibility, visual contrast between the site and its background, the size of the attack, and the directions from which the aircraft approached. The findings of the study are presented in terms of the probability of survival of a SAM site and the price paid by aircraft to suppress it. The measures of survivability used are: the probability that a SAM system is not suppressed when attacked by a given number of aircraft. The expected number of aircraft killed. The expected number of SAM systems suppressed.

ABS: A price of system suppression index (with SHORADS): ratio of total aircraft killed to SAMS suppressed. A price of system suppression index (without SHORADS): ratio of aircraft killed by long range SAMS only to systems suppressed.

ADNO: C008102

AUTH: CARL E. ; MALAMAN R. ; PUCKEY T. ; YOUNGDERG D.
CLSS: S
CORP: ARMY MATERIEL SYSTEMS ANALYSIS AGENCY (ABERDEEN PROVING GROUND, MD)
DATE: 7403
DESC: Nuclear Warfare Theater Survivability Security Safety L1
DESC: THEORY
REPN: AMSAC A 53
SUJO: 3-412-100
SYST: SAM D ; HAWK
TEMP: C0497
TITL: SURVIVABILITY ANALYSIS--SAM-D VERSUS IMPROVED HAWK (U), 150 P., (S)
TNFF: 5850

.block

30612

.endblock

.block

copy: 1 id: 61310-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 30935
ADNO: 921909L
AUTH: COLLINS D.A. ; FACEY R.A.
CLSS: U
CCDE: ZZ (NEUTRON EXPOSURE) DREO
CORP: DEFENSE RESEARCH ESTABLISHMENT OTTAWA (OTTAWA, CANADA)
DATE: 7406
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: TABULAR
REPN: DREO TN 74 17
SUJO: 3-312-100
TITL: PRELIMINARY COMPUTER STUDY OF DOSE PREDICTIONS FOR HUMANS EXPOSED TO
WEAPON NEUTRONS (U), 28 P., (U)

.block

30935

.endblock

.block

copy: 1 id: 61617-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31020
ABS: Experiments were performed to measure the fractional release of uranium compounds when these materials are involved in gasoline fires. Uranium was used as a reasonable stand-in for plutonium. In the experiments reported uranium dioxide particles or uranium nitrate in solution was deposited on various materials ranging from a smooth metal surface to soil. Gasoline was added to these materials, then ignited. Airborne particles were collected at points downstream in the duct in which the combustion tray was located. Various air flow and burning conditions were used. In the burning experiments in which a uranyl nitrate solution was deposited on a

stainless steel PALTE, 11 percent was made airborne with an air flow of 23 mph. This release was the largest for the burning experiments;

ABS: however, as much as 24% of uranium dioxide powder was aerodynamically entrained from dry, sandy soil by air at a velocity of 20 mph. No single variable of the conditions imposed in 40 experiments could be identified as having an over-riding influence on the releases of uranium within the range of variables included in these experiments. A gasoline fire in which 500 gallons was dumped and burned, affirmed that the smaller scaled experiments were reasonably representative of actual fires.

AUTH: MISHIMA J. ; SCHWENDIMAN L.C.

CLSS: U

CORP: BATTELLE PACIFIC NORTHWEST LABS. (RICHLAND, WA)

DATE: 7308

DESC: Nuclear weapon safety radiological L1

DESC: EXPERIMENTAL

REPN: BNWL 1732

SUJO: 4-838-100

TITL: SOME EXPERIMENTAL MEASUREMENTS OF AIRBORNE URANIUM (REPRESENTING PLUTONIUM) IN TRANSPORTATION ACCIDENTS (U), 75 P., (U)

TNFF: 8859

.block

31020

.endblock

.block

copy: 1 id: 61696-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31027

ABS: This report was prepared under the auspices of the Nevada applied ecology group in response to needs for determining the feasibility and environmental impact of cleaning up pu-contaminated areas in Nevada. Instead of considering all aspects of radioactive decontamination, it deals primarily with findings from pertinent land area decontamination and post-management experiences which can be applied to solving Pu problems at the Nevada Test Site and the Tonopah Test Range. Previous experiences from accidental and planned releases of Pu in the environment are discussed along with those gained from nuclear fallout decontamination studies. Considerable attention is given to problems concerning revegetation of arid lands. The fragile nature of the desert is such that any drastic alteration will result in a seriously damaged ecosystem.

ABS: Revegetation by natural means is difficult, if not impossible, from a practical point of view. Post-treatment management of disturbed areas is almost always necessary to insure recovery. Correction of the damage may require greater efforts than the decontamination, and may have more far-reaching consequences than those concerned with the present status of the land. Alternate procedures are discussed which may be useful in Nevada, providing the necessary experimental work is done to test the validity of the assumptions made. Many answers to pertinent questions can be obtained from investigations conducted outside of the Pu areas. Recommendations are made for

experimental work that should be done to determine the best course
of action before cleanup begins.

AUTH: WALLACE A. ; ROMNEY E.M.
CLSS: U
CONN: AT(04 1) GEN 12
CORP: UNIVERSITY OF CALIFORNIA, LABORATORY OF NUCLEAR MEDICINE AND
RADIATION BIOLOGY (LOS ANGELES, CA)
DATE: 7409
DESC: Nuclear Warfare Postattack Recovery decontamination L1
DESC: EXPERIMENTAL
REPN: UCLA 12 973
SUJO: 3-448-900
TITL: FEASIBILITY AND ALTERNATE PROCEDURES FOR DECONTAMINATION AND POST
TREATMENT MANAGEMENT OF PU-CONTAMINATED AREAS IN NEVADA (U), 90 P.,
(U)

.block

31027

.endblock

.block

copy: 1 id: 61703-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31047
CLSS: U
CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)
DATE: 7306
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: EXPERIMENTAL
EFFT: TREE
SUJO: 3-221-000
TITL: EFFECTS OF IONIZING RADIATION DOSE ON MOS DEVICES AT LOW
TEMPERATURES (U), 10 P., (U)
TREE: 325

.block

31047

.endblock

.block

copy: 1 id: 61721-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31062
AUTH: OLDHAM W.G.
CLSS: U
CONN: F 19628 72 C 0215
CORP: UNIVERSITY OF CALIFORNIA, BERKELEY (BERKELEY, CA)
DATE: 7405
DESC: THEORY
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

EFFT: TREE
REPN: AFCRL TR 74 0224
SUJO: 3-221-000
TITL: STUDY OF BULK TRAPPING EFFECTS IN RADIATION-RESISTENCE MOS DEVICES
(U), 34 P., (U)

TREE: 325

.block

31062

.endblock

.block

copy: 1 id: 61735-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31066

AUTH: WILLIAMS R.A.

CLSS: U

CONN: F 19628 74 C 0199

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7410

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

REPN: AFCRL TR 74 0553

SUJO: 3-222-000

TITL: INVESTIGATION OF SOS PROCESSES FOR FABRICATION OF RADIATION HARDENED
MIS DEVICES AND ICS (U), 30 P., (U)

TREE: 325 ; 430

.block

31066

.endblock

.block

copy: 1 id: 61739-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31072

AUTH: AUSTIN W.E. ; LONG D.M. ; SWANT D.H. ; REPPER C.J. ; ENLOW D.L.

CLSS: U

CONN: F 19628 72 C 0335

CORP: GENERAL ELECTRIC CO., SPACE SCIENCES LAB. (PHILADELPHIA, PA)

DATE: 7304

DESC: THEORY EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1

EFFT: TREE

REPN: AFCRL TR 73 0288

SUJO: 3-224-000

TITL: RADIATION HARDENED DETECTOR ELECTRONICS (U), 139 P., (U)

TREE: 361 ; 430

.block

31072

.endblock

.block

copy: 1 id: 61745-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 31929

ADNO: A107893

AUTH: CHAPMAN W.H.

CLSS: U

CONN: DAHC 20 72 C 0314

CORP: FEDERAL EMERGENCY MANAGEMENT AGENCY (WASH., DC)

DATE: 7405

DESC: Nuclear Warfare Postattack Recovery civilians population L1

DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic

internal L1

DESC: THEORY

DESC: Nuclear Weapon Effects ecological L1 FOOD CHAIN CONTAMINATION

REPN: ESA 1

SUJO: 2-223-410 ; 3-312-220 ; 3-341-000 ; 3-442-000

TITL: CRITERIA FOR USE OF CONTAMINATED FOOD IN POST-SHELTER NEOP (U), 62
P., (U)

.block

31929

.endblock

.block

copy: 1 id: 62583-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 32491

ADNO: C951312

AUTH: COOKE B.M.

CLSS: C

CORP: ATOMIC WEAPONS RESEARCH ESTABLISHMENT (ALDERMASTON, BERKSHIRE)

DATE: 7507

DESC: EXPERIMENTAL TABULAR

DESC: Radiation Transport thermal L1

DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1

REPN: AWRE 028 75

SUJO: 5-200-000 ; 9-610-000

TEMP: C2201

TITL: CLASSIFIED TITLE, 51 P., (C)

.block

32491

.endblock

.block

copy: 1 id: 63140-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 32514

ABS: The results of a series of experiments to determine target vulnerability to high power CW laser radiation are given. Operational conditions and environment were simulated. Airflow across a target surface is shown to be important in determining meltthrough time. It is demonstrated that pyroelectric detectors are very useful for monitoring diffusely reflected radiation from the target. A phenomenological description of absorption waves experimentally observed during the target vulnerability determinations is given. temperatures relevant to the luminous region and to its hot central core both immediately after initiation and after realization of a quasi-steady state are determined.

ABS: Calculated ranges of values of air temperature in the hot core (about 11,000 -15,000 degrees K), density, degree of ionization, power radiated per unit volume, and emissivity are consistent with experimental observations of radiated power, absorption coefficient, and the physical dimensions, obtained from framing camera and spectroradiometer results; the calculations are also self consistent. A power balance is obtained. Most of the power absorbed from the laser beam is reradiated, much of it in the vacuum ultraviolet region of the spectrum. Possible mechanisms leading to a quasi-steady state are discussed; an explanation of the observed initial velocity of the absorption wave and of its velocity decay are offered. Supporting experimental results are presented. (author)

ADNO: 525793L

AUTH: ALLEN F.J. ; LYMAN O.R. ; BARB J.C. ; STUMPFEL C.R. ; FRANK K.

CLSS: S

CORP: ARMY BALLISTIC RESEARCH LAB. (ABERDEEN PROVING GROUND, MD)

DATE: 7304

DESC: Directed Energy Weapons Lasers Effects flight systems Helicopters L1

DESC: Directed Energy Weapons Lasers Effects Energy absorption L1

DESC: THEORY EXPERIMENTAL

REPN: BRL R 1643

SUJO: 3-613-010 ; 3-613-350

SYST: UH-1D HELICOPTER

TEMP: C2243

TITL: INVESTIGATIONS OF TARGET VULNERABILITY AND ABSORPTION WAVE PHENOMENA
USING THE XLD-1 LASER (U), 115 P., (S)

.block

32514

.endblock

.block

copy: 1 id: 63163-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 32516

ADNO: C001800L

AUTH: MORITA A.

CLSS: U (DECLASSED)

CONN: F 33615 72 C 1578

CORP: TRW (REDONDO BEACH, CA)

DATE: 7503

DESC: EXPERIMENTAL
DESC: Directed Energy Weapons Lasers Effects Solar cells L1
REPN: AFAPL TR 75 13 ; TRW 21298 6019 RE 00
SUJO: 3-613-130
TEMP: C2272
TITL: LASER RADIATION EFFECTS ON SILICON SOLAR CELLS (U), 158 P., (S)

.block

32516

.endblock

.block

copy: 1 id: 63165-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 32651
ADNO: C005876L
CLSS: S
CONN: N 00024 74 C 1057
CORP: CERBERONICS, INC. (FALLS CHURCH, VA)
DATE: 7406
DESC: SUMMARY
DESC: Directed Energy Weapons Lasers Effects Ships L1 SHIPS
SUJO: 3-613-550
TEMP: C2275
TITL: ANALYSIS OF SURFACE SHIP VULNERABILITY TO LASER RADIATION, VOL. 1,
EXECUTIVE SUMMARY (U), 30 P., (S)

.block

32651

.endblock

.block

copy: 1 id: 63296-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 32730
ADNO: 530594L
AUTH: BAKER J.R. ; BROWN J.M.
CLSS: S
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7405
DESC: Directed Energy Weapons Lasers Effects Missiles L1
DESC: THEORY
REPN: NRL MR 2728
SUJO: 3-613-220
SYST: STYX MISSILE
TEMP: C2278
TITL: VULNERABILITY OF A MISSILE TO LASER RADIATION WITH REGARD TO
STRUCTURAL FAILURE (U), 53 P., (S)

.block

32730

.endblock

.block

copy: 1 id: 63367-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 32799
ADNO: C005411
AUTH: MURPHY J.E. ; CURRISTON L.E. ; HORIO S.P.
CLSS: SRD
CONN: F 04701 75 C 0174
CORP: ROCKWELL INTERNATIONAL CORP. (DOWNEY, CA)
DATE: 7511
DESC: Directed Energy Weapons Lasers Cost Analysis L5
DESC: TABULAR
DESC: Directed Energy Weapons Lasers Applications Anti-satellite L1
REPN: SAMSO TR 75 273 V.1 ; SD 75 SA 0140 1
SUJO: 3-610-800 ; 3-616-150
TEMP: C1960 V.1
TITL: ADVANCED RADIATION SPACE DEFENSE APPLICATION STUDY, VOL. 1,
EXECUTIVE SUMMARY (U), 88 P., (SRD)

.block
32799
.endblock
.block

copy: 1 id: 63433-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 32800
ADNO: C005413
AUTH: MURPHY J.F. ; CURRISTON L.E. ; HORIO S.P.
CLSS: SRD
CONN: F 04701 75 C 0174
CORP: ROCKWELL INTERNATIONAL (DOWNEY, CA)
DATE: 7511
DESC: Directed Energy Weapons Lasers Applications Anti-satellite L1
DESC: Directed Energy Weapons Lasers Cost Analysis L1
DESC: Directed Energy Weapons Lasers Deployed Systems Space laser systems

L1

DESC: TABULAR
REPN: SAMSO TR 75 273 V.3 ; SD 75 SA 0140 3
SUJO: 3-610-800 ; 3-612-100 ; 3-616-150
TEMP: C1960 V.3
TITL: ADVANCED RADIATION SPACE DEFENSE APPLICATION STUDY, VOL. 3, SYSTEM
SYNTHESIS (U), 316 P., (SRD)

.block
32800
.endblock
.block

copy: 1 id: 63434-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 32979
ADNO: C005877L
AUTH: COFFIN S.
CLSS: S
CONN: N 00024 74 C 1057
CORP: CERBERONICS, INC. (FALLS CHURCH, VA)
DATE: 7406
DESC: Directed Energy Weapons Lasers Effects Ships L1
DESC: THEORY EXPERIMENTAL
SUJO: 3-613-550
TEMP: C2289
TITL: ANALYSIS OF SURFACE SHIP VULNERABILITY TO LASER RADIATION, VOL. 2,
TECHNICAL REPORT (U), 368 P., (S)

.block

32979

.endblock

.block

copy: 1 id: 63615-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33100
AUTH: EUBANK B.F. ; MULLEN O.W.
CLSS: C
CONN: AT (26 1)410
CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO. (LAS VEGAS, NV)
DATE: 7301
DESC: Nuclear Weapon Test safety L1
DESC: SUMMARY
REPN: NVO 410 12
TSHO: UG-CONTAINED
SUJO: 4-856-000
TEMP: C2500
TITL: ONSITE RADIOLOGICAL SAFETY REPORT FOR EVENTS NOT PUBLICLY ANNOUNCED,
OPERATION NOUGAT THROUGH OPERATION EMERY, JULY 1961JUNE 1971 (U),
111 P., (C)

.block

33100

.endblock

.block

copy: 1 id: 63731-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33101
AUTH: EUBANK B.F.
CLSS: C
CONN: AT (26 1)410
CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO. (LAS VEGAS, NV)
DATE: 7308
DESC: SUMMARY
DESC: Nuclear Weapon Test safety L1

REPN: NVO 410 19
TSHO: UG-CONTAINED
SUJO: 4-856-000
TEMP: C2501
TITL: OPERATION GROMMET ONSITE RADIOLOGICAL SAFETY REPORT (FOR EVENTS NOT
PUBLICLY ANNOUNCED) JULY 1971 THROUGH JUNE 1972 (U), 33 P., (C)

.block

33101

.endblock

.block

copy: 1 id: 63732-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33102
AUTH: EUBANK B.F.
CLSS: C
CONN: AT (26 1)410
CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO. (LAS VEGAS, NV)
DATE: 7405
DESC: SUMMARY
DESC: Nuclear Weapon Test safety L1
REPN: NVO 410 26
TSHO: UG-CONTAINED
SUJO: 4-856-000
TEMP: C2502
TITL: OPERATION TOGGLE ONSITE RADIOLOGICAL SAFETY REPORT (FOR EVENTS NOT
PUBLICLY ANNOUNCED) JULY 1972 THROUGH JUNE 1973 (U), 29 P., (C)

.block

33102

.endblock

.block

copy: 1 id: 63733-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33103
AUTH: EUBANK B.F. ; MULLEN O.W.
CLSS: C
CONN: AT (26 1)410
CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO. (LAS VEGAS, NV)
DATE: 7409
DESC: SUMMARY
DESC: Nuclear Weapon Test safety L1
REPN: NVO 410 28
TSHO: UG-CONTAINED
SUJO: 4-856-000
TEMP: C2503
TITL: OPERATION ARBOR ONSITE RADIOLOGICAL SAFETY REPORT (FOR EVENTS NOT
PUBLICLY ANNOUNCED) JULY 1973 THROUGH JUNE 1974 (U), 26 P., (C)

.block

33103

.endblock

.block

copy: 1 id: 63734-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33143

AUTH: EUBANK B.F. ; MULLEN O.W.

CONN: E (26 1) 410

CORP: REYNOLDS ELECTRICAL AND ENGINEERING CO. (LAS VEGAS, NV)

DATE: 7512

DESC: Nuclear Weapon Test safety L1

DESC: UNANNOUNCED EVENTS ; EXPERIMENTAL

REPN: NVO 410 32

TSHO: UG-CONTAINED

SUJO: 4-856-000

TEMP: C2578

TITL: OPERATION BEDROCK ONSITE RADIOLOGICAL SAFETY REPORT, JULY 1974
THROUGH JUNE 1975 (FOR EVENTS NOT PUBLICLY ANNOUNCED) (U), 25 P.,
(C)

.block

33143

.endblock

.block

copy: 1 id: 63773-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33476

CLSS: U

CONN: ACDA NWT 251

CORP: NATIONAL ACADEMY OF SCIENCES (WASH., DC)

DATE: 7510

DESC: Nuclear Weapon Environment fallout transport L1

DESC: Nuclear Weapon Effects meteorological Climate Weather Modification

L1

DESC: Nuclear Weapon Effects ecological L1

DESC: Nuclear Warfare General Nuclear War L1

DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic L1

DESC: Nuclear Weapon Effects on plants ionizing radiation chronic uptake

L1

DESC: NUCLEAR WINTER ; SURVEY

REPN: ISBN 0 309 02418 8 ; PB 279 976 ; PB 279976

TSHO: MULTIPLE

SUJO: 2-223-410 ; 2-224-200 ; 2-740-000 ; 3-312-200 ; 3-332-220 ;
3-341-000 ; 3-401-000

TITL: LONG TERM WORLD WIDE EFFECTS OF MULTIPLE NUCLEAR WEAPONS DETONATIONS
(U), 227 P., (U)

.block

33476

.endblock

.block

copy: 1 id: 64172-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33925
ADNO: 914399
AUTH: GRUN E. ; KOSSYK R. ; LOERKE B. ; RENZ W.
CLSS: U
CCDE: RENS (CIRCUIT ANALYSIS) WEST GERMANY
CORP: BUNDESMINISTERIUM DER VERTEIDIGUNG, FORSCHUNGSBERICHT AUS DER
WEHRTECHNIK
DATE: 7300
DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L1
DESC: Nuclear Weapon Effects electronic subsystems analysis circuit
network L1
DESC: THEORY TABULAR
EFFT: TREE
LA: GERMAN ; WEST GERMANY
REPN: BMVG FBWT 73 21
SUJO: 3-213-000 ; 3-219-000
TITL: EFFECT OF PULSED NUCLEAR RADIATION ON SIMULATED ELECTRONIC CIRCUITS;
VOL. 2, USE OF THE EDV-PROGRAM RENS ON AN ANALOG COMPUTER (U), 87
P., (U)
TREE: 330 ; 369

.block

33925

.endblock

.block

copy: 1 id: 64625-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 33955
ABS: Manual provides guidance in the preparation of detailed and
simplified fallout predictions to commanders at all echelons within
the Army and provides procedural guidance for those persons
operating the chemical, biological, and radiological element (CBRE).
CLSS: U
CORP: ARMY (WASH., DC)
DATE: 7310
DESC: TABULAR
DESC: Nuclear Weapon Environment fallout intensity contours patterns L1
ADM INCLUDED
REPN: FM 3 22
SUJO: 2-225-100
TITL: FALLOUT PREDICTION, FIELD MANUAL (U), 80 P., (U)
TNFF: 4860

.block

33955

.endblock

.block

copy: 1 id: 64654-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 34012

ABS: Laser irradiation tests on various spacecraft materials have been performed to assess the damage threshold dependence on the pulse duration of incident laser radiation. The types of materials investigated include optical components, dish antenna materials, and thermal control materials. Targets were irradiated by continuous wave and repetitively pulsed (200 pulses per second, one millisecond pulse duration) CO2 laser radiation. Under the conditions of these experiments, the effects on the targets are the same so long as the same amount of energy is delivered in the same amount of time. Additional tests were performed to assess differences in laser induced effects between 0.5 second exposures and air exposure of equal energy at 5.0 seconds. This was done to determine the effect of deposition time on the damage level.

ABS: It was found that both the visibly observed damage and induced outgassing of condensible materials were more severe for the 0.5 second exposure. Indications are that the effect will be more pronounced for shorter laser pulses. (author)

ADNO: C006224L
AUTH: MORITA A.M. ; JOHNSON R.L. ; BHUTA P.G.
CLSS: S
CONN: F 04701 74 C 0562
CORP: TRW (REDONDO BEACH, CA)
DATE: 7511
DESC: Directed Energy Weapons Lasers Effects Metals L1
DESC: Directed Energy Weapons Lasers Effects Composites L1
DESC: Directed Energy Weapons Lasers Effects Plastics L1
DESC: Directed Energy Weapons Lasers Effects Coatings L1
DESC: Directed Energy Weapons Lasers Effects space systems satellites
spacecraft L1
DESC: EXPERIMENTAL
REPN: SAMSO TR 76 93 ; TRW 26177 6024 RE 00
SUJO: 3-613-050 ; 3-613-060 ; 3-613-090 ; 3-613-100 ; 3-613-250
TEMP: C3494
TITL: SURVEY OF PULSE DURATION EFFECTS ON MATERIALS (U), 103 P., (S)

.block
34012
.endblock
.block

copy: 1 id: 64707-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 34389
AUTH: DAVIS C.G. ; BUNKER S.S.
CLSS: CFRD
CCDE: SPUTTER
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, NM)

DATE: 7402
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Environment Visible Output energy spectrum L1
REPN: LA 5509 MS
SHOT: ENCINO
TSHO: LOW-ALT
SUJO: 1-420-000
TEMP: B4561
TITL: EFFECTS OF THE RADIATION TRANSPORT APPROXIMATIONS ON FIREBALL
MODELING (U), 7 P., (CFRD)

.block

34389

.endblock

.block

copy: 1 id: 65067-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 35155

ABS: Covers procedures and techniques for limiting radiation hazards
resulting from nuclear accidents and incidents and the control
procedures applicable to relatively small areas that contain
hazardous levels of radiological contamination. It describes
procedures for detecting, identifying, measuring, controlling, and
decontaminating radiological contamination and specifies the levels
of radiological contamination that are significant both during
recovery operations and after decontamination at a nuclear
accident/incident site. TM 3-220 and TM 5-225 outline the procedures
that are applicable to large areas of radiological contamination.
This manual is designed primarily for peacetime operations. It has
limited applicability in wartime in a nontactical environment. Alpha
contamination is not considered to be militarily significant.

CLSS: U

CORP: ARMY (WASH., DC)

DATE: 7511

DESC: SUPERCEDES DASIAC 20562 ; HANDBOOK

DESC: Nuclear weapon safety radiological L1

REPN: FM 3 15

SUJO: 4-838-100

TITL: NUCLEAR ACCIDENT CONTAMINATION CONTROL (U), CA. 100 P., (U)

TNFF: 8808 ; 8859

.block

35155

.endblock

.block

copy: 1 id: 65861-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 35448

CLSS: U

CORP: INTERNATIONAL COMMISSION ON RADIATION UNITS AND MEASUREMENTS (WASH.,

DC)

DATE: 7301
DESC: test instruments biomedical simulants phantoms models L1
DESC: test instruments nuclear radiation dosimeters radiacs L1
DESC: EXPERIMENTAL
REPN: ICRU 23
SUJO: 4-346-000 ; 4-352-000
TITL: MEASUREMENT OF ABSORBED DOSE IN A PHANTOM IRRADIATED BY A SINGLE
BEAM OF X OR GAMMA RAYS (U), 30 P., (U)
TREE: 655

.block
35448
.endblock

.block
copy: 1 id: 66151-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 35515
CLSS: U
CORP: NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS (WASH.,
DC)

DATE: 7411
DESC: Nuclear Weapon Effects on animals ionizing radiation L1
DESC: SURVEY
REPN: NCRP 42
SUJO: 3-312-000
TITL: RADIOLOGICAL FACTORS AFFECTING DECISION-MAKING IN A NUCLEAR ATTACK
(U) 66 P., (U)

.block
35515
.endblock

.block
copy: 1 id: 66214-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: 35516
CLSS: U
CORP: NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS (WASH.,
DC)

DATE: 7511
DESC: Nuclear Weapon Effects on animals ionizing radiation chronic
internal L1 UPTAKE
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L5
P.115
DESC: Nuclear Weapon Environment Fallout isotope concentrations L1 SR 90
CS 137

DESC: EXPERIMENTAL
REPN: NCRP 45
SUJO: 2-223-100 ; 2-223-200 ; 3-312-220
TITL: NATURAL BACKGROUND RADIATION IN THE UNITED STATES (U), 163 P., (U)

.block

35516

.endblock

.block

copy: 1 id: 66215-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 36325

AUTH: WIRES R.A. ; MAY I.W.

CLSS: U

CORP: BALLISTIC RESEARCH LAB. (ABERDEEN PROVING GROUND, MD)

DATE: 7307

DESC: Material Properties PEP Materials L1

DESC: EXPERIMENTAL

REPN: BRL IMR 125

SUJO: 7-591-000

TITL: OPTICAL RADIATION CHARACTERISTICS OF SELECTED PROPELLANT SAMPLES

(U), 80 P., (U)

.block

36325

.endblock

.block

copy: 1 id: 67052-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 36327

AUTH: NIILER A. ; BEVERLY W.B. ; BANKS N.E.

CLSS: U

CCDE: SAMCEP

CORP: BALLISTIC RESEARCH LAB. (ABERDEEN PROVING GROUND, MD)

DATE: 7305

DESC: TABULAR

DESC: Radiation Transport neutron L1

REPN: BRL IMR 115

SUJO: 9-650-000

TITL: SENSITIVITY OF ATMOSPHERIC NEUTRON TRANSPORT TO PERTURBATIONS IN THE
NITROGEN ENDF/B -III CROSS SECTIONS (U), 19 P., (U)

TREE: 970

.block

36327

.endblock

.block

copy: 1 id: 67054-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: 38083

ABS: The effects of exposure of Dutch rabbits to 1.7 and 2.45 GHz pulsed
and continuous wave microwave radiation at intensities of from 5 to

25 mW/cm squared have been investigated. Dose dependent transient alterations in rabbit blood chemistry variables were found to be induced by both 1.7 and 2.45 GHz cw microwave exposure. Rectal temperature measurements immediately prior to and during irradiation revealed that at power densities of 10 mW/ cm squared or greater, microwave thermal loading caused elevations of approximately 1 degree Centigrade during 2 hours of exposure. The relationship of the Dutch rabbit body temperature to the duration of drug-induced sleeping time was investigated in microwave irradiated, unirradiated thermally loaded, and unirradiated control animals.

ABS: The effects of continuous wave versus pulsed wave irradiations on drug-induced sleeping time was also investigated using drug dosage as the parameter.

ADNO: A955212
AUTH: CLEARY S.F.
CLSS: U
CONN: DADA 17 72 C 2144
CORP: VIRGINIA COMMONWEALTH U. (RICHMOND, VA)
DATE: 7506
DESC: Nuclear Weapon Effects on plants RF microwave L1
DESC: EXPERIMENTAL
SUJO: 3-334-000
TITL: EFFECT OF LOW INTENSITY MICROWAVE RADIATION ON MAMMALIAN SERUM COMPONENTS (U), 40 P., (U)

.block

38083

.endblock

.block

copy: 1 id: 68937-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: ACT 1-3-28

ABS: This work contains a detailed revision of the treatment of the eigen-function expansion of dyadic Green's functions previously discussed by the author in his book. The singular terms which are missing in the previous work have been amended. Three distinct methods of finding the dyadic Green's function of the electric type are discussed. It is concluded that the method based on the differential equation for the H-field is the simplest. The correct expressions for various dyadic Green's functions are then derived based on this method. In the course of this work, several expansion theorems dealing with a number of dyadic singular functions, or generalized functions, have been found. They are useful in simplifying some integrals encountered in the analysis.

AUTH: Tai C.
CLSS: U
CORP: University of Michigan Radiation Lab. (Ann Arbor, MI)
DATE: 7307
DESC: THEORY
DESC: Electromagnetic Theory Applications L1
EMPF: 900
SUJO: 9-300-000

SYMJ: Analytical and Computational Techniques Mathematics Notes; Vol. 3,
Notes 24-33 (U)

TITL: Eigen-Function Expansion of Dyadic Green's Functions (U), 50 P., (U)

.block

ACT 1-3-28

.endblock

.block

copy: 1 id: 52990-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 85 196

ABS: This report reviews the results of radiation tests conducted by the
six Phase I VHSIC contractors on devices and circuits representing
eight Phase I VHSIC technologies. Test samples were characterized
with respect to five major environmental threats: total dose
effects, neutron damage, ionizing dose rate for upset and latchup,
ionizing dose rate for survivability, and single event upset
produced by alpha particles, protons, and heavy ions. An overall
assessment of the present radiation, hardness capability of each
Phase I technology is provided.

ADNO: B102252

AUTH: SIMONS M.

CLSS: U

CONN: DNA 001 83 C 0012

CORP: RESEARCH TRIANGLE INSTITUTE (RESEARCH TRIANGLE PARK, NC)

DATE: 7506

DESC: SIMULATION (CO 60) SIMULATION (FBR APG) SIMULATION (LINAC NRL)
SIMULATION (BLACKJACK) ; EXPERIMENTAL SUMMARY

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
VHSIC NMOS SRAM BIPOLAR 3D CMOS HARDNESS SUMMARIES IN SECTION 7

EFFT: NEUTRON ; GAMMA ; TREE ; SEU

REPN: DNA TR 85 196 ; RTI 2540 00 01 F

SUJO: 3-222-000

TITL: REVIEW OF RADIATION TEST RESULTS ON PHASE 1 VHSIC DEVICES (U), 172
P., (U)

TREE: 180 ; 329 ; 343 ; 642

.block

DNA 85 196

.endblock

.block

copy: 1 id: 80513-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 1900 7

ABS: This report is an account of work performed to obtain a better
experimental definition of the height-of-burst dependence of the
dust loading in the range of 40 to 1500 feet height of burst scaled
to one megaton. For this purpose several tower shots and one
ground-surface burst (by definition) were analyzed to obtain both
the principal element and the radionuclide concentrations. Dust

loadings were derived from the resulting data. The shot substrates were coral or alluvium. The results were compared with the phenomenological model of McGahanet al. There is some evidence that the dust loading and its dependence on the height of burst are different for the two substrates.

AUTH: NATHANS M.W.
CLSS: SRD
CONN: DNA 001 72 C 0113
CORP: LFE ENVIRONMENTAL ANALYSIS LABS. (RICHMOND, CA.)
DATE: 7410
DESC: Nuclear Weapon Environment dust moisture injection atmosphere L1
DESC: Nuclear Weapon Environment radiation decay isotopic half lives L1
DESC: Nuclear Weapon Environment Fallout Particles size distribution L1
DESC: EXPERIMENTAL SURVEY
REPN: DNA 1900F VOL. 7 ; TLW 5544
SHOT: BRAVO ; ZUNI ; TEWA ; KOON ; LACROSSE ; MOHAWK ; INCA ; BLACKFOOT ;
ERIE ; SIMON ; HARRY ; BADGER ; NANCY ; TURK ; SMOKY ; SMALL BOY ;
SUGAR
TSHO: SURFACE ; WATER-SURFACE ; LOW-ALT
SUJO: 2-222-300 ; 2-222-400 ; 2-223-410
TEMP: A9113
TITL: ADDITIONAL STUDIES OF DUST LOADING FROM NUCLEAR CLOUDS; FINAL REPORT
(U), 60 P., (SRD)
TNFF: 4870

.block

DNA 1900 7

.endblock

.block

copy: 1 id: 75771-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2432 73
ADNO: 715061
AUTH: KLINGENSMITH R.W. ; HAMMAN D.J. ; THATCHER R.K. ; GREEN M.L.
CLSS: U
CONN: DNA 001 73 C 0091
CORP: BATTELLE COLUMBUS LABS. (COLUMBUS, OH)
DATE: 7310
DESC: HANDBOOK
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: Simulation Facilities Techniques TREE L1
REPN: DNA 2432H (73)
SUJO: 4-231-000 ; 4-241-000 ; 4-272-000
TITL: TREE SIMULATION FACILITIES (U), 800 P., (U)
TREE: 642

.block

DNA 2432 73

.endblock

.block

copy: 1 id: 75794-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 2432H
ADNO: 715061
AUTH: KLINGENSMITH R.W. ; HAMMAN D.J. ; THATCHER R.K. ; GREEN M.L.
CLSS: U
CONN: DNA 001 73 C 0091
CORP: BATTELLE COLUMBUS LABS. (COLUMBUS, OH)
DATE: 7310
DESC: HANDBOOK
DESC: Simulation Facilities Techniques TREE L1
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1
DESC: Simulation Facilities Techniques x-ray effects L1
REPN: DNA 2432H
SUJO: 4-231-000 ; 4-241-000 ; 4-272-000
TITL: TREE SIMULATION FACILITIES (U), 800 P., (U)
TREE: 642

.block

DNA 2432H

.endblock

.block

copy: 1 id: 75796-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 2500 2A
ABS: The DNA thermal sourcebook is a comprehensive summary of theoretical
results and experimental data on the prompt thermal radiation
environment produced by atmospheric nuclear bursts. Volume 2 of the
sourcebook presents a complete tabulation of all thermal radiation
measurements made at all U.S. Atmospheric nuclear tests. This part
of volume 2 presents the data for operations Greenhouse,
Buster-Jangle, Tumbler-Snapper and Ivy.
ADNO: 531090
AUTH: WELLS P.B. ; HORTON C.E. ; SACHS D.C. ; BRIGGS E.A.
CLSS: SRD 1
CONN: DASA 01 69 C 0082
CORP: KAMAN SCIENCES CORP (COLORADO SPRINGS COLO)
DATE: 7406
DESC: Nuclear Test Simulation Field Programs experiment design photography
L1
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
DESC: Nuclear Weapon Environment Visible Output rate L1
DESC: Nuclear Weapon Environment Thermal Output source strength total
intensity L1
DESC: Nuclear Weapon Environment Thermal Output rate L1
DESC: SURVEY HANDBOOK EXPERIMENTAL
DESC: Nuclear weapon test yield L1
DESC: Nuclear weapon test timing position firing data L1
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature

Density Particle Velocities L1 TEMPERATURE

DESC: test instruments thermal temperature L1

DESC: Environmental Conditions at Nuclear Weapon Test Site weather L1

DESC: Nuclear weapon test device physical operation construction geometry
materials components L1

REPN: DNA 2500H 2A ; K 73 534 (R)

SHOT: DOG (GH) ; EASY (GH) ; GEORGE (GH) ; ITEM ; BAKER (B-J) ; CHARLIE (B
J) ; DOG (B J) ; EASY (B-J) ; SUGAR ; ABLE (T-S) ; BAKER (T-S) ;
CHARLIE (T-S) ; DOG(T-S) ; EASY (T-S) ; FOX (T-S) ; GEORGE (T-S) ;
HOW ; MIKE ; KING

TSHO: LOW ALT ; SURFACE

SUJO: 1-210-000 ; 1-240-000 ; 1-440-000 ; 2-110-000 ; 2-130-000 ;
4-384-000 ; 4-826-000 ; 4-834-000 ; 4-835-000 ; 4-836-000 ;
4-841-000

TEMP: A7761 (2 COPIES)

TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 2, WEAPONS TEST
DATA TABULATION, PART 1, OPERATIONS GREENHOUSE, BUSTER-JANGLE,
TUMBLER-SNAPPER AND IVY (U), 487 P (SRD).

TNFF: 4840 ; 4845

.block

DNA 2500 2A

.endblock

.block

copy: 1 id: 75806-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2500 2B

ABS: This part of volume 2 presents the data for operations
Upshot-Knothole, Castle and Teapot.

ADNO: 531091

AUTH: WELLS P.B. ; HORTON C.E. ; SACHS D.C. ; BRIGGS E.A.

CLSS: SRD 1

CONN: DASA 01 69 C 0082

CORP: KAMAN SCIENCES CORP (COLORADO SPRINGS COLO)

DATE: 7406

DESC: test instruments thermal temperature L1

DESC: Nuclear weapon test device physical operation construction geometry
materials components L1

DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1 TEMPERATURE

DESC: Environmental Conditions at Nuclear Weapon Test Site weather L1

DESC: Nuclear Weapon Environment Thermal Output source strength total
intensity L1

DESC: Nuclear Weapon Environment Thermal Output rate L1

DESC: Nuclear Weapon Environment Visible Output rate L1

DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1

DESC: Nuclear weapon test yield L1

DESC: EXPERIMENTAL HANDBOOK

DESC: Nuclear Test Simulation Field Programs experiment design photography
L1

DESC: Nuclear weapon test timing position firing data L1

REPN: DNA 2500H 2B ; K 73 534 (R)

SHOT: ANNIE ; NANCY ; RUTH ; DIXIE ; RAY ; BADGER ; SIMON ; ENCORE ; HARRY
 ; GRABLE ; CLIMAX ; BRAVO ; ROMEO ; KOON ; UNION ; YANKEE ; NECTAR ;
 WASP ; MOTH ; TESLA ; TURK ; HORNET ; BEE ; APPLE ; WASP PRIME ; HA ;
 POST ; MET ; APPLE 2
 TSHO: LOW-ALT ; SURFACE ; WATER SURFACE
 SUJO: 1-210-000 ; 1-240-000 ; 1-440-000 ; 2-110-000 ; 2-130-000 ;
 4-384-000 ; 4-826-000 ; 4-834-000 ; 4-835-000 ; 4-836-000 ;
 4-841-000
 TEMP: A7761 (2 COPIES)
 TTIL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 2, WEAPONS TEST
 DATA TABULATION, PT. 2, OPERATIONS UPSHOT-KNOTHOLE THROUGH TEAPOT,
 ROUGH DRAFT (U), CA. 500 P., (SRD)
 TNFF: 4840 ; 4845
 .block
 DNA 2500 2B
 .endblock
 .block
 copy: 1 id: 75807-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent
 .endblock

 INUM: DNA 2500 2C
 ABS: This part of volume 2 presents the data for operations Redwing and
 Plumbbob.
 ADNO: 531092
 AUTH: WELLS P.B. ; HORTON C.E. ; SACHS D.C. ; BRIGGS E.A.
 CLSS: SRD 1
 CONN: DASA 01 69 C 0082
 CORP: KAMAN SCIENCES CORP (COLORADO SPRINGS COLO)
 DATE: 7406
 DESC: Nuclear Weapon Environment Thermal Output source strength total
 intensity L1
 DESC: Nuclear weapon test device physical operation construction geometry
 materials components L1
 DESC: Environmental Conditions at Nuclear Weapon Test Site weather L1
 DESC: Nuclear Weapon Environment Thermal Output rate L1
 DESC: Nuclear Test Simulation Field Programs experiment design photography
 L1
 DESC: Nuclear weapon test timing position firing data L1
 DESC: Nuclear weapon test yield L1
 DESC: HANDBOOK EXPERIMENTAL
 DESC: Nuclear Weapon Environment Visible Output rate L1
 DESC: Nuclear Weapon Environment Infrared Output rate L1
 DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
 REPN: DNA 2500H 2C ; K 73 534 (R)
 SHOT: LACROSSE ; CHEROKEE ; ZUNI ; ERIE ; FLATHEAD ; KICKAPOO ; INCA ;
 DAKOTA ; MOHAWK ; APACHE ; NAVAJO ; TEWA ; HURON ; BOLTZMANN ;
 FRANKLIN ; WILSON ; PRISCILLA ; HOOD ; DIABLO ; JOHN ; KEPLER ;
 OWENS ; STOKES ; SHASTA ; DOPPLER ; FRANKLIN PRIME ; SMOKY
 TSHO: LOW-ALT ; SURFACE ; WATER SURFACE
 SUJO: 1-210-000 ; 1-240-000 ; 1-340-000 ; 1-440-000 ; 2-110-000 ;
 4-826-000 ; 4-834-000 ; 4-835-000 ; 4-836-000 ; 4-841-000
 TEMP: A7761 (2 COPIES)

TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 2, WEAPONS TEST
DATA TABULATION, PT. 3, OPERATIONS REDWING AND PLUMBBOB (U), CA. 500
P., (SRD)

TNFF: 4840 ; 4845

.block

DNA 2500 2C

.endblock

.block

copy: 1 id: 75808-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2500 2D

ABS: This part of volume 2 presents the data for operations Hardtack I,
Hardtack II and Dominic.

ADNO: 531302

AUTH: WELLS P.B. ; HORTON C.E. ; SACHS D.C. ; BRIGGS E.A.

CLSS: SRD 1

CONN: DASA 01 69 C 0082

CORP: KAMAN SCIENCES CORP (COLORADO SPRINGS COLO)

DATE: 7406

DESC: Environmental Conditions at Nuclear Weapon Test Site weather L1

DESC: HANDBOOK EXPERIMENTAL

DESC: Nuclear weapon test yield L1

DESC: Nuclear Weapon Environment Visible Output rate L1

DESC: Nuclear weapon test timing position firing data L1

DESC: Nuclear Weapon Environment Infrared Output rate L1

DESC: Nuclear Weapon Environment Thermal Output source strength total
intensity L1

DESC: Nuclear Test Simulation Field Programs experiment design photography
L1

DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1

DESC: Nuclear weapon test device physical operation construction geometry
materials components L1

DESC: Nuclear Weapon Environment Thermal Output rate L1

REPN: DNA 2500H 2D ; K 73 534 (R)

SHOT: YUCCA ; CACTUS ; FIR ; BUTTERNUT ; KOA ; YELLOWWOOD ; MAGNOLIA ;
TOBACCO ; ROSE ; MAPLE ; WALNUT ; REDWOOD ; ELDER ; OAK ; CEDAR ;
DOGWOOD ; POPLAR ; TEAK ; ORANGE ; FIG ; QUAY ; HAMILTON ; RIO
ARRIBA ; SOCORRO ; WRANGELL ; RUSHMORE ; SANFORD ; HUMBOLDT ; SANTA
FE ; AZTEC ; ARKANSAS ; QUESTA ; YUKON ; MESILLA ; MUSKEGON ; ENCINO
; SWANEE ; CHETCO ; TANANA ; NAMBE ; ALMA ; TRUCKEE ; YESO

TSHO: SURFACE ; WATER SURFACE ; LOW-ALT ; HI-ALT

SUJO: 1-210-000 ; 1-240-000 ; 1-340-000 ; 1-440-000 ; 2-110-000 ;
4-826-000 ; 4-834-000 ; 4-835-000 ; 4-836-000 ; 4-841-000

TEMP: A7761 ; A8034

TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 2, WEAPONS TEST
DATA TABULATION, PART 4, OPERATIONS HARDTACK I, HARDTACK II, AND
DOMINIC (U), 587 P (SRD)

TNFF: 4840 ; 4845

.block

DNA 2500 2D

.endblock

.block

copy: 1 id: 75809-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2500 2E

ABS: This part of volume 2 presents the data for operations Dominic
(continued) and Sunbeam.

ADNO: 531303

AUTH: WELLS P.B. ; HORTON C.E. ; BRIGGS E.A.

CLSS: SRD

CONN: DASA 01 69 C 0082

CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO.)

DATE: 7406

DESC: Nuclear Weapon Environment Infrared Output rate L1

DESC: Nuclear Weapon Environment Visible Output rate L1

DESC: Nuclear Weapon Environment Visible Output energy spectrum L1

DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1

DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1

DESC: Nuclear Weapon Environment Thermal Output L1

DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1 TEMPERATURE

DESC: EXPERIMENTAL HANDBOOK

REPN: DNA 2500H 2E ; K 73 534 (R)

SHOT: SMALL BOY ; LITTLE FELLER 1 ; HARLEM ; RINCONADA ; DULCE ; PETIT ;
OTOWI ; BIGHORN ; BLUESTONE ; STARFISH ; SUNSET ; PAMLICO ; CHAMA ;
CHECKMATE ; BLUEGILL ; CALAMITY ; HOUSATONIC ; KINGFISH ; TIGHTROPE

TSHO: SURFACE ; LOW-ALT ; HI-ALT

SUJO: 1-200-000 ; 1-340-000 ; 1-420-000 ; 1-440-000 ; 2-110-000 ;
2-130-000 ; 2-211-000

TEMP: A7761 ; A8034

TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 2, WEAPONS TEST
DATA TABULATION, PT. 5, OPERATIONS DOMINIC (CON'T) AND SUNBEAM (U),
CA. 400 P., (SRD)

TNFF: 4840 ; 4845

.block

DNA 2500 2E

.endblock

.block

copy: 1 id: 75810-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2500 3

ABS: The DNA thermal sourcebook is a comprehensive summary of theoretical
results and experimental data on the prompt thermal radiation
environment produced by atmospheric nuclear bursts. This Volume of
the sourcebook reports the results of a literature search conducted
to identify and list relevant documents. The results are presented
in the form of a computerized bibliography with indexing by
technical subjects, shot names, authors names and report number.

ADNO: 530246L
AUTH: WELLS P.B. ; BRIGGS E.A. ; ROSAMOND E.H.
CLSS: U
CONN: DASA 01 69 C 0082
CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO.) ; DASAC (SANTA BARBARA, CA.)
DATE: 7402
DESC: BIBLIOGRAPHY
DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
DESC: Nuclear Weapon Environment Thermal Output L1
REPN: DNA 2500H 3 ; K 73 534 (R)
SUJO: 1-200-000 ; 5-200-000
TEMP: A6546
TITL: NUCLEAR WEAPONS THERMAL RADIATION PHENOMENA; VOL. 3, BIBLIOGRAPHY (U), 554 P.,(C)
TNFF: 4840 ; 4845

.block

DNA 2500 3

.endblock

.block

copy: 1 id: 75811-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2787F
AUTH: PUTNAM S. ; SPENCE P. ; ECKER B.M. ; BENFORD J. ; STALLINGS C. ; GUILLORY J. ; PELLINEN D. ; WOOD D. ; CREEDON J.
CLSS: U
CONN: DASA 01 70 C 0063 ; DASA 01 71 C 0052
CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA.)
DATE: 7305
DESC: Plasma Physics MHD fusion L1
DESC: Simulation Facilities Techniques TREE L1
DESC: EXPERIMENTAL
DESC: Radiation Transport electron L1
REPN: PIFR 227/294 ; DNA 2787F
SUJO: 4-272-000 ; 9-500-000 ; 9-680-000
TITL: INTENSE ELECTRON BEAM GENERATION, TRANSPORT AND DIAGNOSIS (U), 250 P., (U)
TREE: 642

.block

DNA 2787F

.endblock

.block

copy: 1 id: 75883-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2830
AUTH: COHEN M.O. ; TROUBETZKOY E. ; LICHTENSTEIN H. ; STEINBERG H. ; BEER M.
CLSS: U

CCDE: SAM-CE
CONN: DNA 001 74 C 0040
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, N.Y.)
DATE: 7407
DESC: THEORY CODE
DESC: Radiation Transport gamma L1
DESC: Radiation Transport neutron L1
DESC: Cross Sections neutron L5
REPN: DNA 2830F (REV.C) ; MR 7021 (REV.C)
SUJO: 9-620-000 ; 9-650-000 ; 9-820-000
TITL: SAM-CE; A THREE DIMENSIONAL MONTE CARLO CODE FOR THE SOLUTION OF THE
FORWARD NEUTRON AND FORWARD AND ADJOINT GAMMA RAY TRANSPORT
EQUATIONS, REVISION C (U), 416 P., (U)

TREE: 960 ; 970

.block

DNA 2830

.endblock

.block

copy: 1 id: 75977-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2881F 1

ABS: This is Volume I of a two-volume sourcebook dealing with the nuclear survivability of propellants, explosives, and pyrotechnics (so-called PEP materials) for aerospace applications. Volume I provides the background information the reader needs to make full use of Volume II, which deals specifically with PEP nuclear survivability. Volume I covers two main subjects on an introductory basis: (1) nuclear radiation and its interaction with matter. (2) technology of propellants, explosives. Pyrotechnics, and various electroexplosive devices used in aerospace weapon systems. (as of 1985 Volume II had not been published.)

ADNO: 916 941L

AUTH: PAITCHEL H. ; COCKAYNE J.E. ; ALGER R.S. ; ELSBERRY R.T. ; THOMAS W.B. ; MCSWAIN J.M.

CLSS: U

CORP: PICATINNY ARSENAL (DOVER, N.J.)

DATE: 7401

DESC: Nuclear Weapon Effects ordnance L1

REPN: DNA 2881F 1

SUJO: 3-160-000

TITL: SOURCEBOOK OF RADIATION EFFECTS ON PROPELLANTS, EXPLOSIVES AND
PYROTECHNICS, VOL. 1 (U), 318 P., (U)

.block

DNA 2881F 1

.endblock

.block

copy: 1 id: 76034-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2889F 2
ADNO: 912366
AUTH: NICOLET W.F. ; BARTLETT E.P. ; KENDALL R.M. ; MORSE H.L.
CLSS: U
CONN: DASA 70 C 0073
CORP: PHYSICS INTERNATIONAL CO (SAN LEANDRO, CA.)
DATE: 7306
DESC: Nuclear Test Simulation Field Programs experiment design aerospace
systems L1
DESC: Nuclear RDT&E Research Program Descriptions integrated effects
system studies L1
DESC: NEST ; THEORY
REPN: PIFR 238 ; DNA 2889F 2
SUJO: 4-160-000 ; 4-829-100
TITL: ADVANCED NEST FEASIBILITY; VOL. 2, NUMERICAL SOLUTION OF THE
TRANSIENT RADIATION-COUPLED TURBULENT BOUNDARY LAYER (U), 182 P.,
(U)

.block

DNA 2889F 2

.endblock

.block

copy: 1 id: 76063-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2894 2-299
AUTH: PALMER D.G. ; FLANAGAN T.J.
CLSS: SRD
CORP: SANDIA LABS. (ALBUQUERQUE, N.M.)
DATE: 7301
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL SUMMARY
EFFT: EMP ; TREE
EMPF: 315 ; 430
TSHO: UG-CONTAINED
SUJO: 3-231-000
SYMJ: PROCEEDINGS OF THE UNDERGROUND NUCLEAR TEST MEASUREMENT SYMPOSIUM II
TITL: CONFIGURATION, SHIELDING, AND GROUNDING OF CABLES EXPOSED TO
GAMMA-NEUTRON RADIATION (U), 22 P., (SRD)
TREE: 420 ; 390

.block

DNA 2894 2-299

.endblock

.block

copy: 1 id: 73216-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2917F
ADNO: 754768
AUTH: WOOLSON W.A. ; COLEMAN W.A.
CLSS: U

CCDE: ANISN ; MORSE ; TWOTRAN
CONN: DASA 01 71 C 0033
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7301
DESC: Radiation Transport gamma L5
DESC: Radiation Transport neutron L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Environment Prompt Neutron source strength total
fluence L1
DESC: test instruments nuclear radiation L1
REPN: DNA 2917F ; SAI 72 539 LJ
SHOT: HENRE
TSHO: LOW-ALT
SUJO: 1-110-000 ; 4-340-000 ; 9-620-000 ; 9-650-000
TITL: RADIATION TRANSPORT METHODS FOR DETERMINING THE RADIATION RESPONSE
FROM GENERAL ANISOTROPIC SOURCES (U), 96 P., (U)
TREE: 960 ; 970

.block

DNA 2917F

.endblock

.block

copy: 1 id: 76090-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2957F
ADNO: 524948
AUTH: BROOKS J. ; BEER M. ; KALOS M.H. ; TROUBETZKOY E.S.
CLSS: SRD
CCDE: ZZ (PHOTON TRANSPORT IN PLASMA) ; XPLASMA
CONN: DASA 01 71 C 0113
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, N.Y.)
DATE: 7303
DESC: Plasma Physics MHD fusion L1
DESC: Radiation Transport x-ray L1
DESC: THEORY
DESC: Cross Sections x-ray L1 IRON
REPN: MR 7025 ; DNA 2957F
SUJO: 9-500-000 ; 9-640-000 ; 9-840-000
TEMP: A3409
TITL: PHOTON INTERACTION WITH A DENSE HIGHLY IONIZED PLASMA--NONLINEAR
COMPTON PROCESSES AND ABSORPTION (U), 102 P., (SRD)
TREE: 980

.block

DNA 2957F

.endblock

.block

copy: 1 id: 76136-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2987 1-139

AUTH: OLIVER D.B. ; SMITH S.
CLSS: SRD
CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA.) ; REDSTONE ARSENAL
(HUNTSVILLE, AL.)
DATE: 7310
DESC: Nuclear Weapon Effects missile systems ABM propulsion L1 VARIOUS
PROPOSED INTERCEPTORS
EFFT: NEUTRON
SUJO: 3-112-240
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUP FOR PROPULSION AND ORDNANCE SYSTEM; VOL. 1
TITL: NUCLEAR RADIATION EFFECTS ON TERMINAL INTERCEPTOR PROPULSION SYSTEMS
(U), 39 P., (SRD)

.block

DNA 2987 1-139

.endblock

.block

copy: 1 id: 73220-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2987 1-543
AUTH: HUNTINGTON J.H. ; SHIMMIN W.L. ; AVRAMI L.
CLSS: SRD
CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA.) ; PICATINNY ARSENAL,
FELTMAN RESEARCH LAB. (DOVER, N.J.)
DATE: 7310
DESC: Nuclear Weapon Effects ordnance explosives L1 DEXTRINATED LEAD AZIDE
DLA POLYVINYL ALCOHOL PVA RD 1333 POWDERS
DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL
EFFT: X-RAY ; THERMAL
SUJO: 3-163-000
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUP FOR PROPULSION AND ORDNANCE SYSTEM; VOL. 1
TITL: RADIATION AND SHOCK INITIATION OF LEAD AZIDE AT ELEVATED
TEMPERATURES (U), 53 P., (SRD)

.block

DNA 2987 1-543

.endblock

.block

copy: 1 id: 73231-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2987 1-613
AUTH: FRANK B.V. ; LITTLE R.G.
CLSS: SRD
CORP: PICATINNY ARSENAL (DOVER, N.J.) ; SIMULATION PHYSICS, INC. (BEDFORD,
MA.)
DATE: 7310
DESC: SIMULATION (ELECTRON-BEAM, FX-35)
DESC: Nuclear Weapon Effects ordnance electroexplosive devices fuses L1

KDNBF KDNBF/DE

EFFT: X-RAY
SHOT: HUDSON SEAL
SUJO: 3-162-000
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUPFOR PROPULSION AND ORDNANCE SYSTEM; VOL. 1
TITL: INITIATION MECHANISMS OF ELECTROEXPLOSIVE DEVICES DUE TO RADIATION
EXPOSURE (U), 54 P., (SRD)

.block

DNA 2987 1-613

.endblock

.block

copy: 1 id: 73233-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2987 1-669
AUTH: GOVER J.E.
CLSS: SRD
CORP: SANDIA LABS. (ALBUQUERQUE, N.M.)
DATE: 7310
DESC: Nuclear Weapon Effects ordnance explosives L1 LEAD AZIDE RD 1333
DEXTRINATED LA PVALA

EFFT: X-RAY
SHOT: DIAMOND SCULLS
SUJO: 3-163-000
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUPFOR PROPULSION AND ORDNANCE SYSTEM; VOL. 1
TITL: RADIATION INITIATION OF LEAD AZIDE (U), 20 P., (SRD)

.block

DNA 2987 1-669

.endblock

.block

copy: 1 id: 73234-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2987 2-271
AUTH: MARTINSON R.H.
CLSS: SRD
CORP: TRW SYSTEMS GROUP (REDONDO BEACH, CA.)
DATE: 7310
DESC: THEORY
DESC: Nuclear Weapon Effects missile systems ABM propulsion L1 FIBERGLAS
CYLINDERS (MOTORS)

EFFT: X-RAY
SUJO: 3-112-240
SYMJ: PROCEEDINGS OF THIRD ANNUAL MEETING OF THE NUCLEAR SURVIVABILITY
WORKING GROUPFOR PROPULSION AND ORDNANCE SYSTEM; VOL. 2
TITL: RADIATION INDUCED FAILURE OF FIBERGLAS MOTOR CASES (U), 31 P., (SRD)

.block

DNA 2987 2-271

.endblock

.block

copy: 1 id: 73239-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 2996F 2
ADNO: 525324
AUTH: POMRANING G.C. ; WILSON H.L. ; WARD P.R. ; PHILLIPS G.T.
CLSS: SRD CNWDI
CCDE: DRAGNET ; SNEER ; MTA ; SNPSHT ; PIPES ; DRAD ; VERA
CONN: DASA 01 71 C 0021
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7301
DESC: Fluid Mechanics hydrodynamics L1 RADIATION COUPLED
DESC: Nuclear Weapon Environment X-ray Output rate L1 CODE PREDICTIONS
CHAPTER 5 VERY EARLY TIME
DESC: Nuclear Weapon Environment X-ray Output energy spectrum L1 CHAPTER 5
DESC: THEORY
REPN: SAI 71 254 LJ ; DNA 2996F 2
SOCE: TAMBOURINE
SUJO: 1-620-000 ; 1-640-000 ; 9-410-000
TEMP: A3492
TITL: DEVELOPMENT AND APPLICATION OF RADIATION HYDRODYNAMICS CODES; VOL. 2
(U), 381 P., (SRD CNWDI)
TREE: 930

.block

DNA 2996F 2

.endblock

.block

copy: 1 id: 76181-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3002T
ADNO: 756258
AUTH: HENDERSON T.R. ; JONES R.K.
CLSS: U
CONN: DA 49 146 XZ 359
CORP: LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH (ALBUQUERQUE,
NM)
DATE: 7302
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: Nuclear Weapon Effects on animals thermal L1
EFFT: GAMMA ; THERMAL
REPN: DNA 3002T
SUJO: 3-312-100 ; 3-313-000
TITL: ORGANIC ACIDS AS METABOLIC INDICATORS; THE METABOLISM OF SUPER 14
C-PROPIONATEIN RATES EXPOSED TO IRRADIATION AND THERMAL INJURIES
(U), 38 P., (U)

.block

DNA 3002T

.endblock

.block

copy: 1 id: 76187-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3007P

ADNO: 524360L

CLSS: SRD CNWDI

CCDE: VERA ; MORSE ; ATR ; POPOP4 ; DELFIC ; KFOC ; SEER ; SIMDEL ; MARAC

CONN: DASA 01 70 C 0035

CORP: DASIAC (SANTA BARBARA, CA.)

DATE: 7301

DESC: Nuclear Weapon Environment Prompt Neutron source strength total
fluence L5 SPRINT WARHEAD

DESC: Cross Sections neutron L5

DESC: Radiation Transport gamma L5

DESC: Nuclear Weapon Environment Initial Gamma source strength total
intensity L5 SPRINT WARHEAD

DESC: Nuclear Weapon Effects missile systems strategic electronics L5

DESC: Radiation Transport x-ray L5

DESC: Cross Sections gamma L5

DESC: Nuclear RDT&E Research Program Descriptions fallout nuclear
radiation transport L1 X-RAY NEUTRON FLUENCE

DESC: Radiation Transport neutron L5

DESC: SUMMARY SURVEY

DESC: Simulation Facilities Techniques biomedical nuclear radiation L9

DESC: Nuclear Weapon Environment Prompt Neutron angular distribution L5
SPRINT WARHEAD

DESC: Nuclear Weapon Environment X-ray Output source strength total
intensity L5 SPRINT WARHEAD

DESC: Simulation Facilities Techniques nuclear radiation fallout
simulation L1

EFFT: X-RAY ; GAMMA

REPN: DASIAC SR 137 ; DNA 3007P

SHOT: [REDACTED]

TSHO: UG-CONTAINED

SUJO: 1-110-000 ; 1-130-000 ; 1-610-000 ; 1-710-000 ; 3-112-130 ;
4-140-000 ; 4-242-000 ; 4-251-000 ; 9-620-000 ; 9-640-000 ;
9-650-000 ; 9-820-000 ; 9-830-000

SYST: SPRINT ; MINUTEMAN ; DEV-117

TEMP: A2028 CY. 54

TITL: PROCEEDINGS OF THE DNA RADIATION PHYSICS LONG RANGE PLANNING MEETING
12-13 APRIL 1972 (U), 222 P., (SRD CNWDI)

.block

DNA 3007P

.endblock

.block

copy: 1 id: 76192-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3012F
ADNO: 524642
AUTH: HAMLIN D.A. ; MYERS B.F. ; SCHOONOVER M.R.
CLSS: SRD
CCDE: HAIR ; DACET ; HAIRQUE ; SIRQUE ; DAC ; CHEX ; DEPOT
CONN: DASA 01 71 C 0142
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7302
DESC: Nuclear Weapon Phenomenology Fireball Chemistry L1
DESC: THEORY
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1
DESC: Nuclear Weapon Environment Infrared Output source strength total
intensity L5
DESC: Nuclear Weapon Phenomenology Atmospheric Ionization Chemistry
general descriptions L1
REPN: SAI 72 238 LF ; DNA 3012F
SHOT: STARFISH
TSHO: HI-ALT
SUJO: 1-310-000 ; 2-160-000 ; 2-214-000 ; 2-311-000
TEMP: A3097
TTTL: STUDIES OF HIGH-ALTITUDE NUCLEAR-INDUCED OPTICAL-INFRA-RED RADIATION
(U), 432 P., (SRD)

.block

DNA 3012F

.endblock

.block

copy: 1 id: 76197-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3026F
ADNO: 757095
AUTH: MCCORMAC B. ; VARNEY R.
CLSS: U
CONN: DNA 001 72 C 0159
CORP: LOCKHEED APLO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7301
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1 CHEMICAL MODELS
AND PROCESSES
DESC: General Atmospheric Properties L1 EDDY DIFFUSION TRANSPORT UV
HEATING
DESC: SUMMARY
REPN: LMSC D311471 ; DNA 3026F
SUJO: 5-100-000 ; 5-400-000 ; 5-800-000
TTTL: SUMMARY OF INSTITUTE PROCEEDINGS PHYSICS AND CHEMISTRY OF UPPER
ATMOSPHERES (U), 68 P., (U)

.block

DNA 3026F

.endblock

.block

copy: 1 id: 76209-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3049T
ADNO: 525766
AUTH: KUMER J.B. ; BENSON R.S. ; FISHER P.C. ; MCCORMAC B.M. ; VARNEY R.N.
; ANDERSON A.D.
CLSS: S
CONN: DASA 01 71 C 0085
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7301
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1 AURORAS
REPN: LMSC B305302 ; DNA 3049T
SUJO: 4-820-600 ; 5-738-000
TEMP: A3442 ; A3927 (MF)
TITL: SIMULATION OF IR NUCLEAR INTERFERENCE WITH HIGH LATITUDE ENERGETIC
PHENOMENA (U), 128 P., (S)

.block

DNA 3049T

.endblock

.block

copy: 1 id: 76231-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3091F
ADNO: 525480
AUTH: SMITH P.R. ; STAHL R.H.
CLSS: SRD
CCDE: GRAP 2 ; ETRAN
CONN: DNA 001 72 C 0238
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7302
DESC: Simulation Facilities Techniques TREE L1
DESC: THEORY TABULAR
DESC: Radiation Transport electron L1
DESC: Simulation Facilities Techniques EMP L1
EFFT: IEMP
EMPF: 391 ; 726
REPN: DNA 3091F ; GULF RT A11124
SUJO: 4-271-000 ; 4-272-000 ; 9-680-000
TEMP: A3626
TITL: ELECTRON BEAMS FOR IEMP SIMULATION (U), 164 P., (SRD)

.block

DNA 3091F

.endblock

.block

copy: 1 id: 76275-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3098P-02
AUTH: DOLAN K.W.
CLSS: SRD
CCDE: SANDYL
CORP: SANDIA LABS. (LIVERMORE, CA.)
DATE: 7306
DESC: Radiation Transport electron L1
DESC: EXPERIMENTAL TABULAR
EFFT: IEMP
EMPF: 391
SUJO: 9-680-000
SYMJ: IEMP SYMPOSIUM
TITL: X-RAY INDUCED ELECTRON EMISSION FROM THICK TARGETS (U), 17 P., (SRD)
TREE: 990

.block

DNA 3098P-02

.endblock

.block

copy: 1 id: 76282-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3098P-03
AUTH: GARTH J.C. ; CHADSEY W.L.
CLSS: SRD
CCDE: POEM
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA.) ; SCIENCE
APPLICATIONS, INC.(ARLINGTON, VA.)
DATE: 7306
DESC: Radiation Transport electron L1
DESC: THEORY EXPERIMENTAL TABULAR
EFFT: IEMP
EMPF: 391
SUJO: 9-680-000
SYMJ: IEMP SYMPOSIUM
TITL: POEM CODE CALCULATIONS OF X-RAY PHOTOEMISSION (U), 14 P., (SRD)
TREE: 990

.block

DNA 3098P-03

.endblock

.block

copy: 1 id: 76283-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3098P-05
AUTH: KOVAR F.R.

CLSS: SRD
CCDE: ETRAN
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7306
DESC: Radiation Transport electron L1
DESC: EXPERIMENTAL TABULAR
EFFT: IEMP
EMPF: 391
SUJO: 9-680-000
SYMJ: IEMP SYMPOSIUM
TTTL: COMPARISON OF EXTRAN CALCULATIONS WITH EXPERIMENTS (U), 8 P., (SRD)
TREE: 990

.block

DNA 3098P-05

.endblock

.block

copy: 1 id: 76285-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3098P-15
AUTH: STAHL R.H. ; POLL R.A.
CLSS: SRD
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.) ; R + D ASSOCIATES (SANTA MONICA, CA.)
DATE: 7306
DESC: THEORY
DESC: test instruments electronic vulnerability EMP L1
EMPF: 865
SUJO: 4-371-000
SYMJ: IEMP SYMPOSIUM
TTTL: MEASUREMENT TECHNIQUES FOR IEMP (U), 15 P., (SRD)

.block

DNA 3098P-15

.endblock

.block

copy: 1 id: 76295-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3098P-17
AUTH: MEREWETHER D.E. ; RADASKY W.A.
CLSS: SRD
CCDE: ZZ
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, N.M.)
DATE: 7306
DESC: THEORY TABULAR
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones rings L1
EFFT: IEMP
EMPF: 391
SUJO: 3-259-400

SYMJ: IEMP SYMPOSIUM
TITL: NONLINEAR ELECTROMAGNETIC FIELDS WITHIN A CYLINDRICAL CAVITY EXCITED
BY IONIZING RADIATION (U), 13 P., (SRD)

.block

DNA 3098P-17

.endblock

.block

copy: 1 id: 76297-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3098P-18
AUTH: BENFORD G.
CLSS: SRD
CORP: UNIVERSITY OF CALIFORNIA (IRVINE, CA.)
DATE: 7306
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1

DESC: Radiation Transport plasma L1

DESC: THEORY EXPERIMENTAL

EFFT: IEMP

EMPF: 391

SUJO: 3-259-400 ; 9-660-000

SYMJ: IEMP SYMPOSIUM

TITL: PINCH EFFECT IN IEMP (U), 19 P., (SRD)

.block

DNA 3098P-18

.endblock

.block

copy: 1 id: 76298-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3098P-21
AUTH: DEPLOMB E.P.
CLSS: SRD
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7306
DESC: THEORY
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1

EFFT: IEMP

EMPF: 391

SUJO: 3-259-400

SYMJ: IEMP SYMPOSIUM

TITL: ANALYTICAL AND COMPUTER SOLUTIONS FOR IEMP PRESSURE EFFECTS (U), 15
P., (SRD)

.block

DNA 3098P-21

.endblock

.block

copy: 1 id: 76301-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3098P-22
AUTH: WENAAS E.P.
CLSS: SRD
CCDE: DIODE
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7306
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
DESC: THEORY TABULAR
EFFT: IEMP
EMPF: 392
SUJO: 3-231-000 ; 3-259-400
SYMJ: IEMP SYMPOSIUM
TITL: SIMPLIFIED IEMP CALCULATIONS (U), 25 P., (SRD)

.block

DNA 3098P-22

.endblock

.block

copy: 1 id: 76302-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3098P-23
AUTH: WOODS A.J. ; WENAAS E.P.
CLSS: SRD
CCDE: TEDIEM ; SPARC ; DIODE
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7306
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
DESC: TABULAR
EFFT: IEMP
EMPF: 391
SUJO: 3-259-400
SYMJ: IEMP SYMPOSIUM
TITL: 2-D, CYLINDRICAL-GEOMETRY, TIME-DEPENDENT IEMP CODES TEDIEM-RZ AND
TEDIEM-R THETA (U), 31 P., (SRD)

.block

DNA 3098P-23

.endblock

.block

copy: 1 id: 76303-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3098P-25
AUTH: MANGAN D.L. ; SCRIVNER G.J.

CLSS: SRD
CCDE: ZZ
CORP: SANDIA LBS. (ALBUQUERQUE, N.M.)
DATE: 7306
DESC: THEORY TABULAR
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
EFFT: IEMP
EMPF: 391
SUJO: 3-259-400
SYMJ: IEMP SYMPOSIUM
TITL: NUMERICAL CALCULATIONS OF RADIATION-DRIVEN CAVITY RESPONSE (U), 13
P., (SRD)

.block

DNA 3098P-25

.endblock

.block

copy: 1 id: 76304-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3098P-37
AUTH: WENAAS E.P. ; LEADON R.E. ; SMITH P.R.
CLSS: SRD
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7306
DESC: Nuclear Weapon Effects space systems spacecraft or satellites
electronics L1
DESC: TABULAR
EFFT: IEMP
EMPF: 398
SUJO: 3-114-300
SYMJ: IEMP SYMPOSIUM
SYST: 777 COMMUNICATIONS SATELLITE
TITL: SGEMP ANALYSIS OF A SATELLITE (U), 24 P., (SRD)

.block

DNA 3098P-37

.endblock

.block

copy: 1 id: 76316-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3107T
ADNO: 912422
AUTH: NOWAK M.J.
CLSS: U
CONN: DNA 001 72 C 0061
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7303
DESC: Fluid Mechanics hydrodynamics L1 COMPUTATIONAL TECHNIQUES
REPN: DNA 3107T ; GULF RT C12540

SUJO: 9-410-000
TITL: ADVANCED EULERIAN COMPUTATIONAL METHODOLOGY (U), 50 P., (U)

.block

DNA 3107T

.endblock

.block

copy: 1 id: 76329-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3110F
ADNO: 763751
AUTH: MOONEY L.G. ; MARSLETT C.W. ; SWANSON R.L.
CLSS: U
CCDE: ARC ; ATR ; MEVDP
CORP: RADIATION RESEARCH ASSOCIATES, INC. (FT. WORTH, TX.)
DATE: 7304
DESC: THEORY CODE
DESC: Nuclear Weapon Effects flight systems airplanes L1 CREW DOSE
EFFT: TREE
REPN: RRA T7302 ; DNA 3110F
SUJO: 3-111-000
TITL: AIRCRAFT RADIATION CODE, ARC (U), 107 P., (U)

.block

DNA 3110F

.endblock

.block

copy: 1 id: 76333-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3119F
ADNO: 526642
AUTH: ARMISTEAD R.A. ; GATES D.C.
CLSS: SRD
CCDE: GLINT
CONN: DNA 001 72 C 0186
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA.)
DATE: 7303
DESC: Nuclear Test Simulation Field Programs experiment design underground
sytems L1 RADIATION FOR ENERGY COUPLING COSTS ACCURACY
DESC: Nuclear Test Simulation Field Programs experiment design x-ray
experiments L1
DESC: test instruments x-ray effects L1 FILTER FLOURESCER TECHNIQUE
APPENDIX A
REPN: DNA 3119F ; SRI 3 4926
SHOT: RED HOT
SUJO: 4-330-000 ; 4-820-500 ; 4-829-300
TEMP: A4013 ; A9021
TITL: CLOSE-IN RADIATION MEASUREMENTS (U), 91 P., (SRD)
TREE: 653

.block

DNA 3119F

.endblock

.block

copy: 1 id: 76340-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 2-080

AUTH: WURSTER W.H. ; TREANOR C.E.

CLSS: SRD

CORP: CALSPAN CORP. (BUFFALO, N.Y.)

DATE: 7306

DESC: Solid Mechanics L1 IR RADIATION (8 TO 14 MICRONS) UO

DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L5

DESC: EXPERIMENTAL

SUJO: 2-214-000 ; 9-200-000

SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM; VOL. 2

TITL: RADIATION FROM SHOCK-HEATED URANIUM-OXYGEN MIXTURES (U), 10 P.,
(SRD)

.block

DNA 3131 2-080

.endblock

.block

copy: 1 id: 73253-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 2-200

AUTH: ARCHER D.H. ; TARR P.W.

CLSS: SRD

CCDE: MICE ; IRCHEM ; MODEL 3

CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)

DATE: 7306

DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1 NEAR IR PREDICTION COMPARED WITH DATA

SHOT: KINGFISH

TSHO: HI-ALT

SUJO: 2-214-000

SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM; VOL. 2

TITL: MICE-IRCHEM CALCULATIONS OF OPTICAL/IR RADIATION FOLLOWING KINGFISH
(U), 11 P., (SRD)

.block

DNA 3131 2-200

.endblock

.block

copy: 1 id: 73259-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 2-228

AUTH: SAPPENFIELD D.
CLSS: SRD
CCDE: RADFLO
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
DATE: 7306
DESC: Nuclear Weapon Environment Thermal Output rate L1 FOR SEVERAL
SPARTANS AS WELL AS KINGFISH
DESC: THEORY
SHOT: KINGFISH
TSHO: HI-ALT
SUJO: 1-240-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM; VOL. 2
TTTL: THERMAL RADIATION FROM HIGH ALTITUDE NUCLEAR BURSTS (U), 11 P.,
(SRD)

.block

DNA 3131 2-228

.endblock

.block

copy: 1 id: 73262-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 2-259
AUTH: WILSON R.N.
CLSS: SRD
CONN: DNA 001 72 C 0145
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
DATE: 7306
DESC: Nuclear Weapon Environment Ultraviolet Output rate L1
DESC: THEORY
TSHO: HI-ALT
SUJO: 1-540-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM; VOL. 2
TTTL: NOTE ON VOLUME EMISSION RATES FOR RESONANCE-LINE RADIATION FROM
DENSE PLASMAS (U), 14 P., (SRD)

.block

DNA 3131 2-259

.endblock

.block

copy: 1 id: 73265-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 4-077
AUTH: DIETZ R.A.
CLSS: SRD
CCDE: SPECTER (TRAPPED RADIATION) LMSC
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, N.M.)
DATE: 7306
DESC: Nuclear Weapon Effects space systems L5
SHOT: STARFISH ; RUSSIAN (62-10-28)
TSHO: HI-ALT

SUJO: 3-114-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM, VOL. 4
TTTL: STATUS OF SPECTER CODE (U), 2 P., (SRD)

.block

DNA 3131 4-077

.endblock

.block

copy: 1 id: 73304-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 4-137
AUTH: GABY L.P.
CLSS: SRD
CCDE: METEOR (HYDRO-RADIATION)
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, N.M.)
DATE: 7306
DESC: Nuclear Weapon Environment Thermal Output rate L1 CODE DEVELOPMENT
SUJO: 1-240-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM, VOL. 4
TTTL: METEOR CODE DEVELOPMENT FOR FIRST THERMAL PULSE RESOLUTION AND
TRANSPORT TECHNIQUE COMPARISON (U), 6 P., (SRD)

.block

DNA 3131 4-137

.endblock

.block

copy: 1 id: 73310-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 5-079
AUTH: VALERIO J.I. ; HAMLIN D.A. ; HUMPHREY C.H.
CLSS: SRD
CCDE: DACCAT ; SPECTRA2
CONN: DNA 001 73 C 0197
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7306
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1 EFFECT OF AL INCLUSION IN
CALCULATIONS
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1
SHOT: CHECKMATE
TSHO: HI-ALT
SUJO: 2-211-000 ; 2-214-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM, VOL. 5
TTTL: CHECKMATE DEBRIS-AIR RADIATION (U), 14 P., (SRD)

.block

DNA 3131 5-079

.endblock

.block

copy: 1 id: 73321-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3131 7-007
AUTH: SEARS R.D.
CLSS: SRD
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7306
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: Emission Spectra of the Atmosphere L1
DESC: ICE CAP ; EXPERIMENTAL
SUJO: 5-600-000 ; 5-800-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM; VOL. 7
TITL: GROUND BASED MEASUREMENTS OF ENERGY INPUT DURING ICE CAP (U), 23 P.,
(SRD)

.block

DNA 3131 7-007

.endblock

.block

copy: 1 id: 73362-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3131 8-037
AUTH: HORAK H.G.
CLSS: SRD
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)
DATE: 7306
DESC: Fluid Mechanics hydrodynamics L1 S SUB N METHODS APPLIED TO COUPLED
RAD-HYDRO CALCS.
DESC: Radiation Transport thermal L1
DESC: THEORY
SUJO: 9-410-000 ; 9-610-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM, VOL. 8
TITL: FIREBALL CALCULATIONS USING THE S SUB N -METHOD (U), 15 P., (SRD)

.block

DNA 3131 8-037

.endblock

.block

copy: 1 id: 73387-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3131 8-073
AUTH: KODIS J.W. ; ZINN J.
CLSS: SRD
CCDE: RADFLO
CORP: LOS ALAMOS SCIENTIFIC LAB. (LOS ALAMOS, N.M.)
DATE: 7306
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1 TR

BASED ON NEW ESTIMATED YIELD SCALING WITH YIELD BASED ON RADFLO
RESULTS

SHOT: TIGHTROPE
SUJO: 2-110-000
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM, VOL. 8
TITL: LASL FIREBALL RADIATION-HYDRODYNAMICS COMPUTATIONS (U), 12 P., (SRD)

.block

DNA 3131 8-073

.endblock

.block

copy: 1 id: 73390-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3131 9-211
AUTH: SUGIUCHI H.
CLSS: SRD
CORP: MARTIN MARIETTA AEROSPACE (ORLANDO, FL.)
DATE: 7306
DESC: Nuclear Weapon Effects EM Propagation absorption blackout L1
SUJO: 2-321-100
SYMJ: PROCEEDINGS OF THE DNA 1973 ATMOSPHERIC EFFECTS SYMPOSIUM; VOL. 9
TITL: RADIATION HYDRODYNAMIC ENHANCEMENT EFFECTS ON LOW ALTITUDE BLACKOUT
(U), 38 P., (SRD)

.block

DNA 3131 9-211

.endblock

.block

copy: 1 id: 73408-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3132 1-241
AUTH: GATES R.H.
CLSS: U
CORP: ARMY ENGINEER WATERWAYS EXPERIMENT STATION (VICKSBURG, MS.)
DATE: 7305
DESC: Simulation Facilities Techniques nuclear radiation fallout
simulation L5
DESC: Nuclear Weapon Environment Ground Shock craters excavations L5
DESC: Nuclear RDT&E Research Program Descriptions blast shock programs L1
DESC: SIMULATION (HE)
SHOT: DIAMOND ORE ; ESSEX ; ARMOR OBSTACLE II
TSHO: UG-VENTED
SUJO: 2-625-000 ; 4-110-000 ; 4-242-000
SYMJ: STRATEGIC STRUCTURE VULNERABILITY/HARDENING LONG RANGE PLANNING
MEETING, 15-17MAY 1973; VOL. 1
TITL: DIAMOND ORE--ESSEX HIGH EXPLOSIVE CRATERING PROGRAM (U), 26 P., (U)

.block

DNA 3132 1-241

.endblock

.block

copy: 1 id: 73433-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3132 1-621
AUTH: CRISCIONE E.S.
CLSS: U
CCDE: HELP ; NOVA ; TRAP
CORP: KAMAN AVIDYNE (BURLINGTON, MA.)
DATE: 7305
DESC: Nuclear Weapon Effects flight systems helicopters L1
DESC: THEORY
EFFT: THERMAL ; AIR-BLAST
SUJO: 3-118-000
SYMJ: STRATEGIC STRUCTURE VULNERABILITY/HARDENING LONG RANGE PLANNING
MEETING, 15-17MAY 1973; VOL. 1
TITL: EFFECTS OF BLAST AND THERMAL RADIATION ON HELICOPTERS (U), 14 P.,
(U)

.block
DNA 3132 1-621

.endblock

.block

copy: 1 id: 73446-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3140F
ADNO: 914252
AUTH: DEPLOMB E.P. ; WOODS A.J.
CLSS: U
CCDE: TEDIEM (IEMP) ; IRT
CONN: DNA 001 72 C 0090
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7303
DESC: SIMULATION (FLASH X-RAY) ; THEORY EXPERIMENTAL TABULAR CODE
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1
EFFT: IEMP
EMPF: 391
REPN: DNA 3140F ; GULF RT A12526
SUJO: 3-259-400
TITL: TEDIEM-RZ AND -R THETA--TWO-DIMENSIONAL TIME-DEPENDENT IEMP COMPUTER
CODES (U), 142 P., (U)

.block

DNA 3140F

.endblock

.block

copy: 1 id: 76372-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3144Z
AUTH: HUSZAR L. ; NESSELER L.J. ; WOOLSON W.A.
CLSS: U
CCDE: ATR
CONN: DASA 01 70 C 0090
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7304
DESC: CODE
DESC: Radiation Transport L1 VARIOUS RADIATIONS IN HOMOGENEOUS AIR
REPN: DNA 3144Z ; SAI 73 534 LJ
SUJO: 9-600-000
TITL: USER'S GUIDE TO VERSION 2 OF ATR (AIR TRANSPORT OF RADIATION) (U),
104 P., (U)

.block

DNA 3144Z

.endblock

.block

copy: 1 id: 76376-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3152T
CLSS: U
CONN: DNA 001 72 C 0193
CORP: BROWER ENGINEERING, INC. (WESTBORO, MA.) ; HONEYWELL RADIATION
CENTER (LEXINGTON, MA.)
DATE: 7301
DESC: test instruments IR L1
DESC: EXPERIMENTAL
DESC: test instruments visible L1
DESC: test instruments UV L1
REPN: DNA 3152T
SUJO: 4-381-000 ; 4-382-000 ; 4-383-000
TITL: PRACTICAL CALIBRATION OF OPTICAL SPECTROMETERS FOR FIELD
MEASUREMENTS (U), 86 P., (U)

.block

DNA 3152T

.endblock

.block

copy: 1 id: 76384-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3159T
ABS: The report presents findings on the behavioral effects of Cobalt-60
gamma irradiation on monkeys performing a complex delayed
match-to-sample (DMTS) task or a simpler visual memorization task.
It was found that the DMTS group reflected clear performance
decrement at lower doses (e.g., several hundred rads midbody) than
previously reported, while the memorization animals tended to show
either no decrement or, in a few cases, response cessation (i.e.,
early transient incapacitation). The latter result has been

characteristic of simple visual discrimination tasks when radiation doses of approximately 1000 rads have been employed. The differences between the two present groups, and the contrasts drawn with previous studies, were explained as a function of greater complexity of the DMTS task and an improved scoring procedure for performance decrement.

ADNO: 767633
AUTH: BRUNER A. ; BOGO V. ; JONES R.K.
CLSS: U
CONN: DASA 01 70 C 0059
CORP: LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH (ALBUQUERQUE, N.M.)
DATE: 7308
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: SIMULATION (ISOTOPE IRRADIATION) ; EXPERIMENTAL
REPN: DNA 3159T
SUJO: 3-312-100
TITL: DELAYED MATCH-TO-SAMPLE PERFORMANCE DECREMENT IN MONKEYS FOLLOWING COBALT-60 IRRADIATION (U), 52 P., (U)

.block

DNA 3159T

.endblock

.block

copy: 1 id: 76392-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3161T
ADNO: 768 921
AUTH: BRUNER A. ; NEELY A.W. ; HENDERSON E.A. ; WEISS G.K.
CLSS: U
CONN: DASA 01 70 C 0059
CORP: LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH (ALBUQUERQUE, N.M.)
DATE: 7308
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
REPN: DNA 3161T
SUJO: 3-312-100
TITL: BARORECEPTOR REFLEX RESPONSE TO PHENYLEPHRINE AND CAROTID OCCLUSION IN MONKEYSRECEIVING 1000 RADS COBALT-60 (U), 26 P., (U)

.block

DNA 3161T

.endblock

.block

copy: 1 id: 76394-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3163T
AUTH: JONES L.A. ; GRIEM H.R. ; MCLEAN E.A.
CLSS: U

CONN: DNA MIPR 73 636
CORP: NAVAL RESEARCH LAB. (WASH., D.C.)
DATE: 7309
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L5
DESC: Nuclear Weapon Phenomenology Atmospheric Ionization Chemistry
general descriptions L5
DESC: Simulation Facilities Techniques EM propagation atmospheric
chemistry high-altitude phenomenolgy L1
DESC: SIMULATION (THETA PINCH) ; EXPERIMENTAL
REPN: DNA 3163T
SUJO: 2-311-000 ; 4-120-000 ; 4-220-000
TTTL: BOUND-BOUND RADIATION/COLLISIONAL RADIATIVE RECOMBINATION IN OXYGEN
AND NITROGEN PLASMAS (U), 22 P., (U)

.block

DNA 3163T

.endblock

.block

copy: 1 id: 76396-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3175F
ADNO: 769 077
AUTH: TAMOR S.
CLSS: U
CONN: DNA 001 72 C 0215
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7310
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: THEORY
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
DESC: Plasma Physics MHD fusion L1
REPN: DNA 3175F ; SAI 73 545 LJ
SUJO: 3-616-750 ; 4-231-000 ; 9-500-000
TTTL: THEORETICAL STUDY OF NON-LTE PROCESSES IN LASER HEATED PLASMAS (U),
46 P., (U)

.block

DNA 3175F

.endblock

.block

copy: 1 id: 76406-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3182T
ADNO: 768 042
AUTH: COHEN M.O. ; BEER M.
CLSS: U
CCDE: SAM-CE
CONN: DNA 001 73 C 0016

CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, N.Y.)
DATE: 7309
DESC: EXPERIMENTAL TABULAR
DESC: Cross Sections gamma L1 CONCRETE PULSE IRRADIATION DATA
DESC: Cross Sections neutron L1
DESC: Radiation Transport gamma L1
DESC: Radiation Transport neutron L1
REPN: MR 7035 ; DNA 3182T
SUJO: 9-620-000 ; 9-650-000 ; 9-820-000 ; 9-830-000
TITL: ADDITIONAL ANALYSIS OF NEUTRON AND SECONDARY GAMMA RAY TRANSPORT IN
CONCRETE USING THE SAM-CE MONTE CARLO CODE (U), 43 P., (U)
TREE: 960 ; 970 ; 411 ; 412

.block

DNA 3182T

.endblock

.block

copy: 1 id: 76412-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3184F 1
ADNO: 772 538
AUTH: WILSON R.N.
CLSS: U
CONN: DNA 001 72 C 0145
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
DATE: 7311
DESC: Radiation Transport L1
DESC: Plasma Physics MHD fusion L1
DESC: THEORY
REPN: DNA 3184F 1 ; MRC R 53
SUJO: 9-500-000 ; 9-600-000
TITL: LINE RADIATION FROM A PLASMA WITH ENERGY TRANSFER BETWEEN IONS AND
ELECTRONS VIA COULOMB SCATTERING, VOL. 1 (U), 76 P., (U)

.block

DNA 3184F 1

.endblock

.block

copy: 1 id: 76413-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3184F 2
ADNO: 772 542
AUTH: WILSON R.N.
CLSS: U
CONN: DNA 001 72 C 0145
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
DATE: 7311
DESC: Radiation Transport L1
DESC: Plasma Physics MHD fusion L1
DESC: THEORY

REPN: DNA 3184F 2 ; MRC R 60
 SUJO: 9-500-000 ; 9-600-000
 TITL: LINE RADIATION FROM A PLASMA WITH ENERGY TRANSFER BETWEEN IONS AND
 ELECTRONS VIA COULOMB SCATTERING, VOL. 2 (U), 58 P., (U)

.block

DNA 3184F 2

.endblock

.block

copy: 1 id: 76414-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3190F
 ADNO: 530910
 AUTH: SCOTT W.H.JR. ; LONERGAN J.A.
 CLSS: SRD
 CONN: DASA 01 71 C 0044
 CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
 DATE: 7308
 DESC: Nuclear Weapon Effects missile systems strategic electronics L1 MM3
 ON FLYOUT INTERNAL DOSE

EFFT: NEUTRON ; GAMMA

REPN: DNA 3190F ; SAI 73 221 LJ

SOCE: W66

SUJO: 3-112-130

SYST: MINUTEMAN 3

TEMP: A7686

TITL: RADIATION RESPONSE FUNCTION FOR THE MINUTEMAN III MISSILE GENERATED
 BY ADJOINTMONTE CARLO (U), 56 P., (SRD)

TREE: 392

.block

DNA 3190F

.endblock

.block

copy: 1 id: 76420-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3192T
 ADNO: 769 914
 AUTH: LONGMIRE C.L. ; LONGLEY H.J.
 CLSS: U
 CONN: DASA 01 71 C 0105
 CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
 DATE: 7309
 DESC: Nuclear Weapon Effects materials metals alloys L1 AL
 DESC: THEORY
 DESC: Radiation Transport electron L1
 EMPF: 251 ; 240
 REPN: DNA 3192T ; MRC N 2
 SUJO: 3-243-000 ; 9-680-000
 TITL: IMPROVEMENTS IN THE TREATMENT OF COMPTON CURRENT AND AIR

CONDUCTIVITY IN EMP PROBLEMS (U), 44 P., (U)

.block

DNA 3192T

.endblock

.block

copy: 1 id: 76422-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3195T

ADNO: 528 312L

AUTH: CLADIS J.B. ; DAVIDSON G.T. ; FRANCIS W.E. ; NEWKIRK L.L. ; WALT M.

CLSS: C

CCDE: SPECTER

CONN: DNA 001 73 C 0065

CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)

DATE: 7310

DESC: Nuclear Weapon Phenomenology High-Altitude injection trapping L1
TRAPPED RADIATION

DESC: CODE

REPN: DNA 3195T ; LMSC D355206

SUJO: 2-217-000

TEMP: A4628

TITL: MODIFICATION OF SPECTER COMPUTER CODE (U), 178 P., (C)

TREE: 940

.block

DNA 3195T

.endblock

.block

copy: 1 id: 76425-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3197F

ADNO: 777 088

AUTH: SCOTT W.H. JR. ; LONERGAN J.A. ; WOOLSON W.A.

CLSS: U

CCDE: MORSE (RADIATION TRANSPORT)

CONN: DASA 01 71 C 0044

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)

DATE: 7402

DESC: Nuclear Weapon Effects missile systems strategic electronics L1

DESC: THEORY

DESC: Nuclear Weapon Effects missile systems strategic materials L1

DESC: Nuclear Weapon Effects ordnance bombs mines warheads nuclear L1

EFFT: NEUTRON ; TREE ; NEUTRON HEATING

REPN: DNA 3197F ; SAI 72 581 LJ

SUJO: 3-112-120 ; 3-112-130 ; 3-161-100

TITL: ADJOINT MONTE CARLO GENERATION OF RADIATION RESPONSE FUNCTIONS FOR
COMPLEX MISSILES (U), 76 P., (U)

TREE: 392

.block

DNA 3197F

.endblock

.block

copy: 1 id: 76427-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3216F 1

ADNO: 530379

AUTH: HAMLIN D.A. ; LOWEN R.W. ; MYERS B.F. ; SCHOONOVER M.R. ; VALERIO
J.I.

CLSS: SRD CNWDI

CCDE: FOTOKEM ; DUVS (UV FIREBALL) SAI ; DACCAT ; SALT (MHD) SAI

CONN: DASA 01 70 C 0024

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)

DATE: 7405

DESC: THEORY

DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1 UV FIREBALL

REPN: DNA 3216F 1 ; SAI 73 220 LJ VOL. 1

SHOT: CHECKMATE

TSHO: HI-ALT

SUJO: 2-211-000

TEMP: A7522

TITL: THEORETICAL HIGH-ALTITUDE NUCLEAR EXPLOSION STUDIES; VOL. 1,
GENERATION AND DEPOSITION OF RADIATION FROM DEBRIS-AIR PISTONS;
PHENOMENOLOGY OF MK-12 EVENTS (U), 348 P., (SRD CNWDI)

.block

DNA 3216F 1

.endblock

.block

copy: 1 id: 76447-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3216F 2

ADNO: 920209

AUTH: HAMLIN D.A. ; LOWEN R.W. ; MYERS B.F. ; SCHOONOVER M.R. ; VALERIO
J.I.

CLSS: U

CCDE: FOTOKEM ; GLUV ; CHIEF

CONN: DASA 01 70 C 0024

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)

DATE: 7405

DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1

DESC: ULTRAVIOLET DEPOSITION AND LATE-TIME DEIONIZATION CHEMISTRY IN E-AND
F-REGIONSBENCHMARK PROBLEMS ; THEORY

DESC: Nuclear Weapon Phenomenology Atmospheric Ionization Chemistry
general descriptions L1

DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1

REPN: DNA 3216F 2 ; SAI 73 220 LJ VOL. 2
SUJO: 2-211-000 ; 2-212-000 ; 2-311-000
TITL: THEORETICAL HIGH-ALTITUDE NUCLEAR-EXPLOSION STUDIES; VOL. 2,
RESONANCE TRAPPING, DEPOSITION, AND RESULTING CHEMISTRY OF
ULTRAVIOLET RADIATION; ENERGY DEPOSITION OF HEAVY PARTICLES (U), 344
P., (U)

.block

DNA 3216F 2

.endblock

.block

copy: 1 id: 76448-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3223Z

ADNO: 923561

AUTH: KEITH J.R. ; WELLS P.B. ; DONALDSON M.E. ; BATHKE E.A.

CLSS: U

CCDE: TRAX (THERMAL TRANSPORT) KN ; TAX (THERMAL TRANSPORT) KN

CONN: DASA 01 69 C 0082

CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO.)

DATE: 7409

DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1

TRANSMISSION VISIBLE AND IR

REPN: DNA 3223Z ; K 74 4U (R)

SUJO: 5-200-000

TITL: ATMOSPHERIC TRANSMISSION OF NUCLEAR WEAPON THERMAL RADIATION (U), 80

P., (U)

.block

DNA 3223Z

.endblock

.block

copy: 1 id: 76455-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3225Z

ADNO: 531277

AUTH: STRAKER E.A. ; ALLEN L.C. ; GRAHAM K.D. ; GRINER G.M.

CLSS: SRD

CCDE: IDEA (RADIATION ENVIRONMENT) SAI

CONN: DNA 001 73 C 0015

CORP: SCIENCE APPLICATIONS, INC. (HUNTSVILLE, AL.)

DATE: 7407

DESC: Nuclear Weapon Environment Initial Gamma dose rate pulse width L1

DESC: CODE

DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1

DESC: Nuclear Weapon Environment X-ray Output source strength total

intensity L1

DESC: Nuclear Weapon Environment Prompt Neutron angular distribution L1

DESC: Nuclear Weapon Phenomenology Fireball Energy Partition Energy

Coupling L1

DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L1
DESC: Nuclear Weapon Environment Airblast static overpressure ARRIVAL
TIME.L1
REPN: DNA 3225Z ; SAI 74 208 HU
SUJO: 1-130-000 ; 1-610-000 ; 1-740-000 ; 2-110-000 ; 2-150-000 ;
2-223-200 ; 2-611-000
SYST: SPRINT
TEMP: A7902
TITL: PREDICTIONS OF RADIATION ENVIRONMENTS IN A DISTURBED ATMOSPHERE (U),
60 P., (SRD)
TREE: 900

.block

DNA 3225Z

.endblock

.block

copy: 1 id: 76457-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3226F
ADNO: 530610
AUTH: SCOTT W.H.JR. ; LONERGAN J.A.
CLSS: SRD
CCDE: MORSE ; MISC (UNFOLDS SPRINT RESPONSE) SAI
CONN: DNA 001 71 C 0044
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7406
DESC: Nuclear Weapon Effects missile systems ABM L1 DOSES AS RECEIVED
WITHIN THE SPRINT MISSILE FROM ANOTHER SPRINT DETONATION
DESC: SPRINT RADIATION RESPONSE DATA BASE
EFFT: NEUTRON ; GAMMA
REPN: DNA 3226F ; SAI 73 223 LJ
SOCE: XW-66
SUJO: 3-112-200
SYST: SPRINT
TEMP: A7607
TITL: RADIATION RESPONSE FUNCTION FOR THE SPRINT MISSILE GENERATED BY
ADJOINT MONTE CARLO (U), 72 P., (SRD)
TREE: 392

.block

DNA 3226F

.endblock

.block

copy: 1 id: 76458-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3235F
AUTH: SEARS R.D.
CLSS: U
CONN: DNA 001 73 C 0110
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)

DATE: 7312
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
DESC: EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments IR L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: test instruments visible L1
REPN: DNA 3235F ; LMSC D354546
SUJO: 4-120-000 ; 4-382-000 ; 4-383-000 ; 4-820-600 ; 4-823-000 ;
5-738-000
TITL: IONOSPHERIC IRREGULARITIES; ALASKA PHOTOMETRIC MEASUREMENTS (U), 80
P., (U)

.block

DNA 3235F

.endblock

.block

copy: 1 id: 76466-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3239F
AUTH: VON ROSENBERG C.W.JR. ; TRAINOR D.W. ; LOWENSTEIN A.
CLSS: U
CONN: DNA 001 72 C 0007
CORP: AVCO EVERETT RESEARCH LAB. (EVERETT, MA.)
DATE: 7402
DESC: test instruments IR L1
DESC: test instruments EM propagation atmospheric chemistry L1
DESC: EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments UV L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1
REPN: DNA 3239F
SUJO: 4-320-000 ; 4-381-000 ; 4-383-000 ; 4-820-600 ; 5-400-000
TITL: OPTICAL INTERFERENCE PHENOMENON (U), 83 P., (U)

.block

DNA 3239F

.endblock

.block

copy: 1 id: 76469-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3246F
AUTH: RAYMOND J.P. ; POCOCK D.N. ; PERKINS C.W. ; ASHE J.E.

CLSS: U
CONN: DASA 01 70 C 0093
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7503
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: EXPERIMENTAL
EFFT: TREE
REPN: DNA 3246F ; NRTC 73 11R
SUJO: 3-222-000
TITL: MSI/LSI RADIATION EFFECTS STUDY (U), 214 P., (U)
TREE: 325

.block

DNA 3246F

.endblock

.block

copy: 1 id: 76476-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3251F
ADNO: 777 072
AUTH: HOFFMAN A.L.
CLSS: U
CONN: DNA 001 72 C 0218
CORP: MATHEMATICAL SCIENCES NORTHWEST, INC. (SEATTLE, WASH.)
DATE: 7311
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
DESC: EXPERIMENTAL
DESC: Simulation Facilities Techniques x-ray effects L1 SOFT X-RAY
GENERATOR
REPN: DNA 3251F
SUJO: 3-616-750 ; 4-231-000
TITL: LASER HEATING OF MAGNETICALLY CONFINED PLASMAS FOR X-RAY PRODUCTION
(U), 151 P., (U)

.block

DNA 3251F

.endblock

.block

copy: 1 id: 76481-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3272T
ABS: The effort expended by the Study Group in this undertaking was designed to accumulate as much information as possible that might provide a basis for a source book on plutonium, its deposition and retention in the human body, and methods to reduce the plutonium contamination hazard. The effort was divided between: (1) a literature search of past and current documents, manuals, regulations, etc., personal contact with knowledgeable persons in the field and by attendance at meetings and symposia that were

fortuitously scheduled during the early months of the study, and (2) development of the coupled differential equations, based on the 1965 and the proposed 1973 physiological lung models, that predict the deposition and translocation of inhaled plutonium in the human body. A historical review of plutonium and the general contamination situation, along with a review of early U.S.

ABS: Policy (e.g., in the days of the Manhattan Project), provide a good background for this problem. Next, the biology of plutonium contamination is discussed; past as well as current research in this field conducted by the DoD, AEC, and other agencies is reviewed. New concepts and ideas, such as lung lavage and the use of chelating agents, are introduced which are currently being used to reduce plutonium body burdens. That plutonium which remains in the body after inhalation (the most likely, as well as most dangerous, ingress method into the body) is translocated from the lung to the lymphatic system, blood, bone, liver, and gastrointestinal tract; the differential equations describing these phenomena are solved and with the best values available for the constraints, graphs and tables are presented that give the burdens, doses, and dose rates to these different parts of the body.

ABS: A very important conclusion reached, based on the 1965 physiological lung model and shown even more emphatically by the proposed 1973 lung model, is that the lung is the critical organ and not the lymph nodes or lymphatic system as lately proposed by a number of people. Foreign standards for plutonium contamination levels, as they appear in the literature available in this country, are given to give the reader an overall view. The last section of the report gives much useful information relating to the decontamination operation and includes decontamination methods and their efficiencies. 101 references are cited, and some of these references refer to hundreds of others.

AUTH: COBB F.C. ; VAN HEMERT R.L.

CLSS: U

CORP: DEFENSE NUCLEAR AGENCY, FIELD COMMAND (KIRTLAND AFB, N.M.)

DATE: 7309

DESC: HANDBOOK

DESC: Nuclear Weapon Environment Fallout Particles L1

DESC: Nuclear Weapon Effects on plants ionizing radiation chronic L1

DESC: Nuclear Weapon Environment fallout redistribution L1

DESC: Nuclear Weapon Effects on animals ionizing radiation chronic internal L1

REPN: DNA 3272T

SUJO: 2-222-000 ; 2-225-500 ; 3-312-220 ; 3-332-200

TTTL: SOURCE BOOK ON PLUTONIUM AND ITS DECONTAMINATION (U), 100 P., (U)

TNFF: 6220

.block

DNA 3272T

.endblock

.block

copy: 1 id: 76501-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3275F
ADNO: 530919
AUTH: WILSON H.L. ; BYRNE R.N. ; CIPLICKAS A.J. ; LATKO R.J. ; POMRANING
G.C.
CLSS: SRD
CCDE: MTA (1D RAD HYDRO) SAI ; DRAGNET (2D RAD HYDRO) SAI
CONN: DNA 001 72 C 0044
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7407
DESC: Radiation Transport thermal L1 COUPLED WITH HYDRO
DESC: Fluid Mechanics hydrodynamics L1 RADIATION COUPLED
REPN: DNA 3275F ; SAI 73 525 LJ
SUJO: 9-410-000 ; 9-610-000
TEMP: A7683
TITL: THEORETICAL AND NUMERICAL RADIATION HYDRODYNAMICS (U), 214 P., (SRD)
TREE: 980

.block

DNA 3275F

.endblock

.block

copy: 1 id: 76504-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3279T
AUTH: WOOLSON W.A. ; HUSZAR L. ; HARRIS R.J.JR.
CLSS: U
CCDE: ATR ; OGRE
CONN: DASA 01 70 C 0090
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7408
DESC: Radiation Transport x-ray L1
DESC: THEORY
DESC: Radiation Transport gamma L1
REPN: DNA 3279T ; SAI 73 629 LJ
SUJO: 9-620-000 ; 9-640-000
TITL: MODELS OF PHOTON RADIATION TRANSPORT IN AIR (U), 70 P., (U)
TREE: 960 ; 980

.block

DNA 3279T

.endblock

.block

copy: 1 id: 76508-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3282T
ADNO: A015667
AUTH: STOECKLY R.E.
CLSS: U
CCDE: MICE WITH RAD DIFFUSSION (MRC)
CONN: DNA 001 75 C 0142

CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7507
DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
OPACITY
DESC: Cross Sections x-ray L5 AIR
REPN: DNA 3282T ; MRC R 77
TSHO: LOW-ALT ; MULTIPLE
SUJO: 5-200-000 ; 9-840-000
TITL: RADIATION DIFFUSION AND HYDRODYNAMICS CODE FOR LOW-ALTITUDE MULTIPLE
BURSTS (U), 40 P., (U)

.block

DNA 3282T

.endblock

.block

copy: 1 id: 76511-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3283T
AUTH: WHITE R.K.
CLSS: U
CONN: DNA 001 72 C 0143
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA.)
DATE: 7305
DESC: test instruments EM propagation atmospheric chemistry L1
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
DESC: SUMMARY
DESC: test instruments IR L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L1
DESC: Nuclear Test Simulation Field Programs experiment design rocket
probe sounding rocket descriptions balloons L1
REPN: DNA 3283T ; EGU TN 1928 2
SUJO: 4-120-000 ; 4-320-000 ; 4-383-000 ; 4-820-000 ; 4-820-600 ;
4-820-900 ; 5-738-000
TITL: ICECAP 73; A SUMMARY REPORT (U), 29 P., (U)

.block

DNA 3283T

.endblock

.block

copy: 1 id: 76512-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3291F 2
ADNO: 530 064

AUTH: BYRNE R.N.
CLSS: C
CCDE: RHINO
CONN: DASA 01 71 C 0161
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7404
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L5
DESC: Radiation Transport gamma L1
DESC: Nuclear Weapon Environment Initial Gamma energy spectrum L5
DESC: CODE
DESC: Radiation Transport neutron L1
REPN: DNA 3291F 2 ; SAI 72 242 LJ VOL. 2
SUJO: 1-120-000 ; 1-720-000 ; 9-620-000 ; 9-650-000
TEMP: A6190 VOL. 2 ; A7545 (MF)
TITL: NEUTRON AND GAMMA RAY OUTPUT FROM NUCLEAR WEAPONS; VOL. 2, RHINO
USER'S MANUAL(U), 62 P., (C)
TREE: 910 ; 920

.block

DNA 3291F 2

.endblock

.block

copy: 1 id: 76521-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3293F
ADNO: 779892
AUTH: SEARS R.D. ; EVANS J.E. ; VARNEY R.N.
CLSS: U
CONN: DNA 01 73 C 0224
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7401
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: ICECAP ; THEORY EXPERIMENTAL
REPN: DNA 3293F ; LMSC D 348174
SUJO: 4-820-600 ; 5-738-000
TITL: ICE CAP ANALYSIS--MECHANISMS FOR ENERGY DEPOSIT IN THE AURORAL
IONOSPHERE (U),64 P., (U)

.block

DNA 3293F

.endblock

.block

copy: 1 id: 76523-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3298F
ADNO: 778 366

AUTH: FRANK A.L. ; BENTON E.V. ; ALBERGOTTI J.C.
CLSS: U
CONN: DNA 001 72 C 0109
CORP: UNIVERSITY OF SAN FRANCISCO (SAN FRANCISCO, CA.)
DATE: 7403
DESC: test instruments nuclear radiation neutron L1
REPN: DNA 3298F
SUJO: 4-342-000
TITL: PASSIVE NEUTRON DETECTOR WITH ENERGY RESOLUTION BETWEEN 3 AND 20 MEV
(U), 71 P., (U)
TREE: 652

.block

DNA 3298F

.endblock

.block

copy: 1 id: 76527-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3302F
ADNO: 530927
AUTH: CHRISTIAN R.H.
CLSS: SRD CNWDI
CONN: DNA 001 72 C 0208
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
DATE: 7405
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: PROPOSED TESTS FOR HARDSITE-REQUIREMENTS
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
REPN: DNA 3302F ; MRC R 98
TSHO: LOW-ALT
SUJO: 4-820-600 ; 4-823-000
SYST: SPRINT
TEMP: A7698
TITL: ATMOSPHERIC NUCLEAR TEST READINESS REQUIREMENTS OF THE SITE DEFENSE
SYSTEM (U), 120 P., (SRD CNWDI)

.block

DNA 3302F

.endblock

.block

copy: 1 id: 76531-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3303F
AUTH: TROUBETZKOY E.S. ; KALOS M.H. ; STEINBERG H.
CLSS: U
CCDE: SAM-IV ; BAND IV ; GENI IV
CONN: DNA 001 72 C 0057
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, N.Y.)

DATE: 7312
DESC: THEORY
DESC: Radiation Transport L1
DESC: Shielding Protection L1
REPN: DNA 3303F
SUJO: 9-600-000 ; 9-800-000
TITL: SAM-IV; A THREE DIMENSIONAL MONTE CARLO RADIATION PENETRATION CODE
FOR THE ILLIAC IV (U), 192 P., (U)

.block

DNA 3303F

.endblock

.block

copy: 1 id: 76532-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3327F
AUTH: CLADIS J.B. ; DAVIDSON G.T. ; FRANCIS W.E. ; NEWKIRK L.L. ; WALT M.
CLSS: U
CONN: DNA 001 73 C 0141
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7407
DESC: THEORY EXPERIMENTAL
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
REPN: DNA 3327F ; LMSC/D358493
SUJO: 5-400-000 ; 5-738-000 ; 5-800-000
TITL: INVESTIGATION OF PHENOMENA AFFECTING AURORAL IONOSPHERE (U), 76 P.,
(U)

.block

DNA 3327F

.endblock

.block

copy: 1 id: 76555-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3345F 1
ADNO: 531276
AUTH: HAMLIN D.A. ; MYERS B.F. ; SCHOONOVER M.R. ; VALERIO J.I.
CLSS: SRD
CONN: DNA 001 73 C 0147
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7408
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1 CHEMILUMINESCENCE
DESC: Nuclear Weapon Phenomenology ionospheric waves heave gravity waves
L1 HEAVE

DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1
DESC: Mathematics L5 INTEGRATION METHODS
REPN: DNA 3345F 1 ; SAI 74 549 LJ VOL. 1
SHOT: STARFISH
TSHO: HI-ALT
SUJO: 2-211-000 ; 2-214-000 ; 2-618-000 ; 9-990-000
TEMP: A7903
TITL: FURTHER OPTICAL-INFRARED RADIATION STUDIES; VOL. 1, NITRIC OXIDE
CHEMILUMINESCENCE IN THE STARFISH EVENT; OZONE CHEMILUMINESCENCE
(U), 100 P., (SRD)

.block

DNA 3345F 1

.endblock

.block

copy: 1 id: 76573-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3345F 2
AUTH: MYERS B.F. ; SCHOONOVER M.R.
CLSS: U
CONN: DNA 001 73 C 0147
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7410
DESC: THEORY
DESC: Radiation Transport IR L1
DESC: Nuclear Weapon Environment Infrared Output L1 NO POPULATION
DISTRIBUTION BAND PROFILES RADIATING SPECIES
REPN: DNA 3345F 2 ; SAI 74 549 LJ VOL. 2
SUJO: 1-300-000 ; 9-670-000
TITL: FURTHER OPTICAL-INFRARED RADIATION STUDIES; VOL. 2, A MODEL FOR
DESCRIBING RADIATION PROCESSES (U), 68 P., (U)

.block

DNA 3345F 2

.endblock

.block

copy: 1 id: 76574-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3347T
ADNO: 531193
AUTH: WILSON R.N.
CLSS: CFRD
CONN: DNA 001 74 C 0037
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA.)
DATE: 7407
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1 UV
REPN: DNA 3347T ; MRC R 125 ; MRC IR 74 170
SUJO: 2-214-000

TEMP: A7851
TITL: LINE RADIATION FROM A PLASMA WITH ENERGY TRANSFER BETWEEN IONS AND
ELECTRONS VIA COULOMB COLLISIONS III (U), 74 P., (CFRD)

.block

DNA 3347T

.endblock

.block

copy: 1 id: 76576-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3380H 1

ABS: This DNA-sponsored handbook provides source material on nuclear weapon phenomenology, atmospheric processes, and effects of disturbed atmospheric environments on electromagnetic propagation for use in analysis of radar and communication systems. This edition of the handbook is a revision of DASA 1580 and DASA 1580-1 (same title) and replaces those documents. The handbook is divided into seven chapters plus appendixes published in three volumes. Chapter 1 provides an introduction to nuclear weapon effects on electromagnetic propagation and a summary of communication and radar system performance in nuclear environments. Chapters 2, 3, and 4 present detailed descriptions of weapon radiations and energy deposition in the atmosphere, the phenomenology of heated regions, and atmospheric processes affecting weapon-produced, atmospheric ionization.

ABS: Chapters 5, 6, and 7 describe electromagnetic propagation effects and weapon-produced noise sources affecting radar and communication systems. The several appendixes include material on the properties of the atmosphere and earth's magnetic field, reference material on electromagnetic propagation and thermal radiation, and parametric scaling for weapon-produced regions and effects.

ADNO: 532188

AUTH: KNAPP W.S. ; SCHWARTZ K. ; THOMPSON J.H. ; MCNAMARA W.

CLSS: SRD CNWDI

CONN: DNA 001 72 C 0180

CORP: GENERAL ELECTRIC-TEMPO (SANTA BARBARA, CA.)

DATE: 7409

DESC: Nuclear Weapon Environment Summaries L1

DESC: Nuclear Weapon Phenomenology atmospheric ionization em blackout L1

REPN: DNA 3380H 1 ; 74 TMP 03 VOL. 1

SUJO: 1-000-000 ; 2-300-000

TEMP: A7734 VOL. 1

TITL: ELECTROMAGNETIC BLACKOUT HANDBOOK; VOL. 1, INTRODUCTION TO NUCLEAR WEAPON EFFECTS, WEAPON OUTPUTS, AND PHENOMENOLOGY OF HEATED REGIONS (THIRD EDITION) (U), 492 P., (SRD CNWDI)

TNFF: 4882

.block

DNA 3380H 1

.endblock

.block

copy: 1 id: 76610-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
 .endblock

INUM: DNA 3393F
 AUTH: HANSEN D.F. ; PIERSON A.H. ; SHULER M.P. ; STEWART H.S. ; TUTTLE
 A.H. ; WOOLAVER L.B.
 CLSS: S
 CONN: DNA 001 73 C 0174
 CORP: HSS, INC. (BEDFORD, MA.)
 DATE: 7412
 DESC: SUMMARY OF RECORDS TAKEN ; EXPERIMENTAL
 DESC: Nuclear Weapon Environment Visible Output energy spectrum L5 EVENT 1
 ONLY AT 1.5 SECOND
 DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L5 EVENT
 1 ONLY FOR LESS THAN ONE SECOND
 DESC: Nuclear Test Simulation Field Programs experiment design optical
 radiation experiments UV visible IR L1
 DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
 TRANSMISSION PACIFIC ATMOSPHERE DISCUSSION OF METHODS
 REPN: DNA 3393F ; HSS B005
 SHOT: FRENCH (73-07-21) ; FRENCH (73-07-28) ; FRENCH (73-08-18) ; FRENCH
 (73-08-24)
 TSHO: LOW-ALT
 SUJO: 1-420-000 ; 2-110-000 ; 4-820-600 ; 5-200-000
 TEMP: A8918
 TITL: OPERATION HULA HOOP OPTICAL MEASUREMENTS HSS FIELD PROGRAM (U), 206
 P., (S)

.block

DNA 3393F

.endblock

.block

copy: 1 id: 76625-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent
 .endblock

INUM: DNA 3398F
 ADNO: A001391
 AUTH: WURSTER W.H.
 CLSS: U
 CONN: DNA 001 72 C 0098
 CORP: CALSPAN CORP. (BUFFALO, N.Y.)
 DATE: 7408
 DESC: EXPERIMENTAL
 DESC: test instruments IR L5
 DESC: Nuclear Weapon Environment Infrared Output L1
 DESC: test instruments EM propagation atmospheric chemistry L5
 REPN: DNA 3398F ; WB 5117 A 3
 SUJO: 1-300-000 ; 4-320-000 ; 4-383-000
 TITL: URANIUM-OXYGEN RADIATION STUDIES (U), 52 P., (U)

.block

DNA 3398F

.endblock

.block

copy: 1 id: 76630-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3463T
ADNO: A 006428
AUTH: BRUNER A.
CLSS: U
CONN: DASA 01 70 C 0059 ; DNA 001 74 C 0098
CORP: LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH (ALBUQUERQUE,
NM)
DATE: 7412
DESC: SIMULATION (CO60 AND MONKEYS) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects on animals ionizing radiation L1 PERFORMANCE
DECREMENT
EFFT: GAMMA
REPN: DNA 3463T
SUJO: 3-312-000
TITL: EFFECTS OF 60 CO ON ELECTRICAL SELF-STIMULATION OF THE BRAIN AND
BLOOD PRESSURE (U), 28 P., (U)

.block

DNA 3463T

.endblock

.block

copy: 1 id: 76695-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3488F
AUTH: TAMOR S. ; LATKO R.J. ; BYRNE R.N.
CLSS: U
CCDE: LASER (X RAYS FROM PLASMAS) SAI ; LION (LASER IONIZATION) SAI
CONN: DNA 001 73 C 0074
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7412
DESC: Simulation Facilities Techniques x-ray effects L1 X RAYS FROM LASER
HEATED PLASMAS
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
REPN: DNA 3488F ; SAI 73 648 LJ
SUJO: 3-616-750 ; 4-231-000
TITL: STUDIES IN THE DYNAMICS AND RADIATION OF LASER HEATED PLASMAS (U),
149 P., (U)

.block

DNA 3488F

.endblock

.block

copy: 1 id: 76725-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3506F
AUTH: SARGIS D.A. ; STEVENS C.A. ; DIETZ R.E.
CLSS: SRD
CONN: DNA 001 73 C 0152
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7503
DESC: Radiation Transport x-ray L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Environment X-ray Output angular distribution L1
DESC: Nuclear Weapon Environment X-ray Output rate L1
DESC: Nuclear Weapon Environment X-ray Output energy spectrum L1 P 35
EMPF: 240
REPN: DNA 3506F ; SAI 74 218 LJ
SOCE: SPARTAN
SUJO: 1-620-000 ; 1-630-000 ; 1-640-000 ; 9-640-000
TEMP: A9497
TITL: CALCULATION OF LATE-TIME HIGH ALTITUDE EMP SOURCES (U), 180 P.,
(SRD)

.block

DNA 3506F

.endblock

.block

copy: 1 id: 76744-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3511F
AUTH: KOFKY I.L. ; MERIWETHER J.W. JR. ; SCHROEDER J.W. ; SLUDER R.B.
CLSS: U
CONN: DNA 001 73 C 0027
CORP: PHOTO METRICS, INC. (LEXINGTON, MA.)
DATE: 7504
DESC: test instruments EM propagation atmospheric chemistry L1
DESC: Nuclear RDT&E Research Program Descriptions EM propagation
atmospheric chemistry L1
DESC: EXPERIMENTAL TABULAR SUMMARY
DESC: test instruments IR L1
DESC: test instruments visible L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: test instruments UV L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: Nuclear Test Simulation Field Programs experiment design atmospheric
ionization RF propagation noise L1
REPN: DNA 3511F ; PHM 110 74 ; HAES 04
SUJO: 4-120-000 ; 4-320-000 ; 4-381-000 ; 4-382-000 ; 4-383-000 ;
4-820-600 ; 4-823-000 ; 5-738-000
TITL: DATA REDUCTION AND AURORAL CHARACTERIZATIONS FOR ICECAP; HAES REPORT
NO. 4 (U), 333 P., (U)

.block

DNA 3511F

.endblock

.block

copy: 1 id: 76748-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3513T
AUTH: MYERS B.F. ; SCHOONOVER M.R.
CLSS: U
CCDE: ISRAD
CONN: DNA 001 74 C 0149
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)
DATE: 7501
DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: THEORY TABULAR
DESC: Radiation Transport electron L1
DESC: Nuclear Weapon Environment fallout Deposition L1
DESC: Nuclear Weapon Environment Fallout Formation mechanics L1
REPN: DNA 3513T ; SAI 74 619 LJ
SUJO: 2-221-000 ; 2-225-000 ; 5-200-000 ; 5-400-000 ; 9-680-000
TITL: ELECTRON ENERGY DEGRADATION IN THE ATMOSPHERE--CONSEQUENT SPECIES
AND ENERGY DENSITIES, ELECTRON-FLUX, AND RADIATION SPECTRA (U), 84
P., (U)

.block

DNA 3513T

.endblock

.block

copy: 1 id: 76750-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3515F
AUTH: GATES D.C. ; KREHL P. ; MAGEE T.J. ; ARMISTEAD R.A.
CLSS: U
CONN: DNA 001 73 C 0252
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA.)
DATE: 7501
DESC: test instruments nuclear radiation dosimeters radiacs L1
REPN: DNA 3515F ; PYU 2596
SUJO: 4-346-000
TITL: THERMALLY STIMULATED CURRENT DOSIMETRY (U), 50 P., (U)
TREE: 655

.block

DNA 3515F

.endblock

.block

copy: 1 id: 76752-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3517F
AUTH: RAYMOND J.P. ; ASHE J.E. ; PERKINS C.W. ; WONG T.Y. ; FUJII J.T.
CLSS: U
CONN: DNA 001 73 C 0154
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7503
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
REPN: DNA 3517F ; NRTC 74 6R
SUJO: 3-222-000
TITL: STUDY OF RADIATION EFFECTS IN MSI/LSI TECHNOLOGIES (U), 190 P., (U)
TREE: 320 ; 325

.block

DNA 3517F

.endblock

.block

copy: 1 id: 76753-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3518T-1
ADNO: B 002608L
AUTH: FLANAGAN T.M. ; POLL R.A.
CLSS: U
CONN: DASA 01 71 C 0092
CORP: INTELCOM RAD TECH (SAN DIEGO, CA.)
DATE: 7412
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects materials ceramics optical L1
EFFT: TREE
REPN: DNA 3518T 1 ; INTEL RT 8085 146
SUJO: 3-241-000
TITL: RADIATION EFFECTS IN QUARTZ CRYSTALS; PT. 1, A PEHNOMENOLOGICAL
SUMMARY (U), 70 P., (U)
TREE: 361 ; 367

.block

DNA 3518T-1

.endblock

.block

copy: 1 id: 76754-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3518T-1S
ADNO: C005269
AUTH: FLANAGAN T.M. ; POLL R.A.
CLSS: SRD
CONN: DASA 01 71 C 0092
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7311
DESC: Nuclear Weapon Effects electronic pieceparts measuring devices

sensors detectors L1

EFFT: X-RAY ; TREE
REPN: DNA 3518T 1 ; INTEL RT 8085 146S
SUJO: 3-224-000
TEMP: B0838
TITL: RADIATION EFFECTS IN QUARTZ CRYSTALS; PT. 1, A PHENOMENOLOGICAL
SUMMARY, CLASSIFIED SUPPLEMENT (U), 18 P., (SRD)
TREE: 367

.block

DNA 3518T-1S

.endblock

.block

copy: 1 id: 76755-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3525F
AUTH: SCHAIPLY J.H. ; WILSON A.R.
CLSS: SRD CNWDI
CCDE: VERA (X-RAY OUTPUT) SAI
CONN: DNA 001 72 C 0112
CORP: SYSTEMS, SCIENCE AND SOFTWARE (LA JOLLA, CA)
DATE: 7507
DESC: Nuclear Weapon Environment X-ray Output L1
DESC: THEORY CODE
DESC: Radiation Transport x-ray L1
REPN: DNA 3525F ; SSS CR 72 1449
SOCE: SPARTAN
SUJO: 1-600-000 ; 9-640-000
TEMP: B0377
TITL: CODE DEVELOPMENT FOR THE VERA SYSTEM OF CODES (U), 132 P., (SRD
CNWDI)
TREE: 930

.block

DNA 3525F

.endblock

.block

copy: 1 id: 76762-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3533F
ADNO: C 000951
AUTH: SWANSON R.L. ; MOONEY L.G.
CLSS: CFRD
CCDE: DECRE (FIREBALL RADIOACTIVITY) RRA
CONN: DNA 001 72 C 0247
CORP: RADIATION RESEARCH ASSOCIATES, INC. (FT. WORTH, TX.)
DATE: 7501
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L1 FROM
FIREBALL PHENOMENOLOGY FROM RANC
DESC: CODE

REPN: DNA 3533F ; RRA T 7405
TSHO: LOW-ALT
SUJO: 2-223-200
TEMP: A8876
TTTL: FISSION-PRODUCT GAMMA-RAY VOLUME SOURCE CODE DECRE (U), 61 P.,
(CFRD)

.block

DNA 3533F

.endblock

.block

copy: 1 id: 76771-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3538F
ADNO: A011133
AUTH: NEWELL J.M. ; MOONEY L.G. ; LIVESAY R.B.
CLSS: U
CCDE: INRADS (GAMMA SHIELDING) RRA
CONN: DNA 001 73 C 0211
CORP: RADIATION RESEARCH ASSOCIATES, INC. (FT. WORTH, TX.)
DATE: 7505
DESC: Nuclear Weapon Effects animals L1
DESC: Cross Sections gamma L1
DESC: THEORY CODE
REPN: DNA 3538F ; RRA T 7410
SUJO: 3-310-000 ; 9-830-000
TTTL: SYSTEM OF SHIP-SHIELDING CODES INRADS (U), 71 P., (U)
TREE: 411

.block

DNA 3538F

.endblock

.block

copy: 1 id: 76775-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3547T
AUTH: FRICKE M.P.
CLSS: U (DECLASSED)
CONN: DNA 001 73 C 0266
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)
DATE: 7504
DESC: Target Analysis civilians population at risk casualties L1
DESC: Nuclear Weapon Effects on animals thermal L1
DESC: Nuclear Weapon Effects on animals ionizing radiation L1
DESC: Nuclear Weapon Effects on animals blast shock L1
DESC: SUMMARY
REPN: DNA 3547T ; SAI 74 560 LJ
SUJO: 3-311-000 ; 3-312-000 ; 3-313-000 ; 3-433-000
TEMP: A9694
TTTL: PRELIMINARY CIVILIAN CASUALTY CRITERIA FOR LOW-YIELD NUCLEAR WEAPONS

(U), 114 P., (C)

.block

DNA 3547T

.endblock

.block

copy: 1 id: 76784-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3554F

AUTH: HYMAN H. ; KUNG R.T.V. ; VON ROSENBERG C.W. JR.

CLSS: U

CONN: DNA 001 73 C 0151

CORP: AVCO EVERETT RESEARCH LAB., INC. (EVERETT, MA.)

DATE: 7502

DESC: Absorption Spectrum Transmission Opacity of Natural Heated Air L1 IR
OXYGEN AT 10,000 DEG K

REPN: DNA 3554F

SUJO: 5-200-000

TITL: PLASMA RADIATION EFFECTS (U), 34 P., (U)

.block

DNA 3554F

.endblock

.block

copy: 1 id: 76792-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 1-245

AUTH: OLIVER D.B. ; THOMAS W.B.

CLSS: SRD

CONN: DAAH 01 74 C 0633

CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA) ; ARMY MISSILE COMMAND
(REDSTONE ARSENAL, AL)

DATE: 7500

DESC: SIMULATION (ELECTRON BEAM) SIMULATION (REACTOR)

DESC: Nuclear Weapon Effects ordnance propellants solid L1 WHILE BURNING
TP-H8158 TPH7067 (7068) MSL-100 FAE-7 (FTB) FVB-M1

EFFT: X-RAY ; NEUTRON

SHOT: DIDO QUEEN

SUJO: 3-164-000

SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY PROPULSION
AND ORDNANCESYSTEMS; VOL. 1

TITL: PULSED RADIATION EFFECTS ON CANDIDATE ADVANCED INTERCEPTOR
PROPELLANT BALLISTIC PROPERTIES (U), 27 P., (SRD)

.block

DNA 3557 1-245

.endblock

.block

copy: 1 id: ~3546-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 1-273
AUTH: FINN R. ; LEVY P.W. ; HERLEY P.J.
CLSS: SRD
CORP: BROOKHAVEN NATIONAL LAB. (UPTON, NY) ; STATE UNIVERSITY OF NEW YORK
AT STONY BROOK (STONY BROOK, NY)
DATE: 7500
DESC: Nuclear Weapon Effects ordnance propellants solid L1 AMMONIUM
PERCHLORATE IN CRYSTAL FORM
DESC: SIMULATION (FEBETRON) SIMULATION (CO 60) ; EXPERIMENTAL
EFFT: X-RAY ; NEUTRON ; GAMMA
SUJO: 3-164-000
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY PROPULSION
AND ORDNANCESYSTEMS; VOL. 1
TTTL: RECENT RADIATION EFFECT STUDIES ON AMMONIUM PERCHLORATE; PT. 1,
THERMAL DECOMPOSITION KINETICS OF AMMONIUM PERCHLORATE SINGLE
CRYSTALS FOLLOWING IRRADIATIONWITH GAMMA RAYS AND FAST NEUTRONS AT
DIFFERENT DOSE RATES (U), 26 P., (SRD)

.block

DNA 3557 1-273

.endblock

.block

copy: 1 id: 73547-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 1-301
AUTH: HERLEY P.J. ; WANG C.S. ; VARSI G. ; LEVY P.W.
CLSS: SRD
CORP: STATE UNIVERSITY OF NEW YORK AT STONY BROOK (STONY BROOK, NY) ; JET
PROPULSIONLAB. (PASADENA, CA) ; BROOKHAVEN NATIONAL LAB. (UPTON, NY)
DATE: 7500
DESC: Nuclear Weapon Effects ordnance propellants solid L1 AMMONIUM
PERCHLORATE
DESC: SIMULATION (CO-60) SIMULATION (REACTOR) ; EXPERIMENTAL
EFFT: NEUTRON ; GAMMA
SUJO: 3-164-000
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY PROPULSION
AND ORDNANCESYSTEMS; VOL. 1
TTTL: RECENT RADIATION EFFECT STUDIES ON AMMONIUM PERCHLORATE; PT. 2, THE
EFFECT OF FAST NEUTRON, GAMMA-RAY AND COMBINED RADIATIONS ON THE
THERMAL DECOMPOSITION OF AMMONIUM PERCHLORATE POWDER-ALUMINUM
PARTICLE MIXTURES (U), 14 P., (SRD)

.block

DNA 3557 1-301

.endblock

.block

copy: 1 id: 73548-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 1-317
AUTH: CASE J.A. ; OLIVER D.B. ; BEALE G.A.
CLSS: SRD
CONN: F 04611 73 C 0014
CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA) ; AIR FORCE ROCKET
PROPULSION LAB.(EDWARDS AFB, CA)
DATE: 7500
DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects ordnance propellants solid L1 ANB-3066
AFPRL-HTPH AAP-34-24-2 WHILE BURNING AAP-3442 TP-F 1066 BURNING RATE
MECHANICAL STRENGTH
EFFT: X-RAY
SUJO: 3-164-000
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY PROPULSION
AND ORDNANCESYSTEMS; VOL. 1
TTTL: PULSED IONIZING RADIATION EFFECTS ON BALLISTIC AND MECHANICAL
PROPERTIES OF AIR FORCE CANDIDATE PROPELLANTS (U), 29 P., (SRD)

.block

DNA 3557 1-317

.endblock

.block

copy: 1 id: 73549-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 1-401
AUTH: KAZI A.H. ; WATSON J.L. ; HARRISON R.C. ; LEWIS H.N.
CLSS: SRD
CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)
DATE: 7500
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1 ARMY PULSE RADIATION FACILITY APRFR
SUJO: 4-241-000
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY PROPULSION
AND ORDNANCESYSTEMS; VOL. 1
TTTL: FAST NEUTRON PULSE IRRADIATION TECHNIQUES FOR ORDNANCE ITEMS AND
BURNING MINIATURE ROCKET MOTORS (U), 49 P., (SRD)
TREE: 642

.block

DNA 3557 1-401

.endblock

.block

copy: 1 id: 73553-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 2-053
AUTH: GERSTLE J.H. ; BOSWORTH T.J. ; CLINTON W.W. ; IHLENFELDT E.T.
CLSS: SRD
CORP: BOEING CO. (SEATTLE, WA)
DATE: 7500
DESC: SIMULATION (FX-25 ACCELERATOR) SIMULATION (E-BEAM) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects missile systems strategic propulsion L1 BE
BLOCK PSRE AXIAL ENGINE NOZZLE
EFFT: X-RAY
SUJO: 3-112-140
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 2
SYST: MM
TITL: PULSED RADIATION EFFECTS ON THE LOW CYCLE FATIGUE OF BERYLLIUM (U),
31 P., (SRD)

.block

DNA 3557 2-053

.endblock

.block

copy: 1 id: 73563-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 2-145
AUTH: MATTERN P.L. ; WATKINS L.M. ; SKOOG C.D. ; BRANDON J.R. ; BARSIS
E.H.
CLSS: SRD
CORP: SANDIA LABS. (LIVERMORE, CA)
DATE: 7500
DESC: SIMULATION (CO-60) SIMULATION (FEBETRON) SIMULATION (REACTOR)
DESC: Nuclear Weapon Effects materials ceramics optical L1 FIBER OPTICAL
GLASS AND PLASTIC
EFFT: X-RAY ; NEUTRON ; GAMMA
SUJO: 3-241-000
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 2
TITL: EFFECTS OF RADIATION ON GLASS AND PLASTIC OPTICAL WAVEGUIDES (U), 31
P., (SRD)
TREE: 361

.block

DNA 3557 2-145

.endblock

.block

copy: 1 id: 73566-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 3-061
AUTH: BRUMLEY F.B. ; GOVER J.E.
CLSS: SRD
CCDE: NUCYL (HYDRO)
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7500
DESC: Nuclear Weapon Effects ordnance explosives L1 LEAD AZIDE
EFFT: X-RAY ; IEMP
EMPF: 396
SUJO: 3-163-000
SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION

AND ORDNANCE SYSTEMS; VOL. 3

TITL: COMPARISON OF ONE-AND TWO-DIMENSIONAL CALCULATIONS OF
RADIATION-INDUCED ELECTRIC FIELDS IN SQUIB GEOMETRIES (U), 16 P.,
(SRD)

.block

DNA 3557 3-061

.endblock

.block

copy: 1 id: 73575-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3557 3-079

AUTH: HARTMAN E.F. ; SCOTT C.G. ; GOVER J.E.

CLSS: SRD

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7500

DESC: Nuclear Weapon Effects ordnance explosives L1 LEAD AZIDE IN VARIOUS
CONTAINERS

DESC: EXPERIMENTAL

EFFT: X-RAY

SHOT: DIDO QUEEN

SUJO: 3-163-000

SYMJ: PROCEEDINGS OF FOURTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 3

TITL: INITIATION MECHANISM OF LEAD AZIDE AT LOW DOSE LEVELS IN A RADIATION
ENVIRONMENT (U), 23 P., (SRD)

.block

DNA 3557 3-079

.endblock

.block

copy: 1 id: 73576-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3558F

AUTH: WILSON H.L. ; NALIBOFF D. ; HOTING S. ; BUSCO F.

CLSS: U

CCDE: DRAGNET (WEAPON OUTPUT) SAI

CONN: DNA 001 72 C 0067

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA.)

DATE: 7407

DESC: Fluid Mechanics hydrodynamics L1

DESC: Radiation Transport x-ray L1

DESC: THEORY TABULAR CODE

REPN: DNA 3558F ; SAI 74 601 LJ

SUJO: 9-410-000 ; 9-640-000

TITL: CONVERSION OF THE DRAGNET CODE TO THE ILLIAC IV (U), 98 P., (U)

TREE: 980

.block

DNA 3558F

.endblock

.block

copy: 1 id: 76798-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3564F 1
AUTH: ALLEN R.T. ; BAILEY L.E. ; BAKER J.C. ; SCHNEYER G.P. ; WILKINS D.
CLSS: SRD
CCDE: VERA 2D (RADIATION TRANSPORTS SSS)
CONN: DNA 001 74 C 0030
CORP: SYSTEMS, SCIENCE AND SOFTWARE (LA JOLLA, CA)
DATE: 7504
DESC: Nuclear Weapon Phenomenology Fireball Energy Partition Energy
Coupling L1
DESC: SNOW COVER CONSIDERED ; THEORY EXPERIMENTAL
DESC: Nuclear Weapon Environment Thermal Output rate L9 P 17 EARLY TIME
REPN: DNA 3564F 1 ; SSS CR 74 2430
SHOT: MING BLADE
SUJO: 1-240-000 ; 2-150-000
SYST: SADM
TEMP: B0398
TTTL: ENERGY COUPLING FOR NEAR SURFACE NUCLEAR BURSTS; VOL. 1, SUMMARY AND
RESULTS (U), 332 P., (SRD)

.block

DNA 3564F 1

.endblock

.block

copy: 1 id: 76805-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3565F
AUTH: JONES L.A.
CLSS: U
CONN: DNA MIPR 65 580
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7502
DESC: THEORY EXPERIMENTAL
DESC: Composition Chemistry Atmosphere Reaction Rates L1
DESC: Plasma Physics MHD fusion L1
REPN: DNA 3565F
SUJO: 5-400-000 ; 9-500-000
TTTL: BOUND-BOUND RADIATION/COLLISIONAL-RADIATIVE RECOMBINATION IN OXYGEN
AND NITROGEN PLASMAS (U), 56 P., (U)

.block

DNA 3565F

.endblock

.block

copy: 1 id: 76808-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3566F
ADNO: A018196
AUTH: SEARS R.D.
CLSS: U
CONN: DNA 001 73 C 0224
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7510
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: HAES ICECAP ; EXPERIMENTAL
DESC: Meteorology L5
REPN: DNA 3566F ; LMSC D407248 ; HAES 5
SUJO: 5-500-000 ; 5-738-000 ; 5-800-000
TITL: ICE CAP ANALYSIS; ENERGY DEPOSIT AND TRANSPORT IN THE AURORAL
IONOSPHERE ICE CAP 73-74; HAES REPORT NO. 5 (U), 60 P., (U)

.block

DNA 3566F

.endblock

.block

copy: 1 id: 76809-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3567T
AUTH: ARCHER D.H. ; TARR P.W.
CLSS: U
CCDE: ARCTIC
CONN: DNA 001 74 C 0143
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7504
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Weapon Phenomenology High-Altitude auroras L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: HAES ; THEORY EXPERIMENTAL
DESC: Emission Spectra of the Atmosphere L1
REPN: DNA 3567T ; MRC R 152 ; HAES 06
SUJO: 2-215-000 ; 4-820-600 ; 5-600-000 ; 5-738-000
TITL: AURORAL SIMULATION STUDIES; HAES REPORT NO. 6 (U), 152 P., (U)

.block

DNA 3567T

.endblock

.block

copy: 1 id: 76810-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3568F
AUTH: VON ROSENBERG C.W. JR. ; TRAINOR D.W.
CLSS: U
CONN: DNA 001 72 C 0007
CORP: AVCO EVERETT RESEARCH LAB. (EVERETT, MA.)
DATE: 7502
DESC: test instruments IR L1
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: THEORY EXPERIMENTAL
DESC: Composition Chemistry Atmosphere Reaction Rates L1
REPN: DNA 3568F
SUJO: 4-383-000 ; 4-820-600 ; 5-400-000
TTTL: OPTICAL INTERFERENCE PHENOMENON (U), 32 P., (U)

.block

DNA 3568F

.endblock

.block

copy: 1 id: 76811-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3597F
AUTH: MANLEY O.P. ; WALTZ R.E.
CLSS: U
CONN: DNA 001 73 C 0177
CORP: VISIDYNE, INC. (BURLINGTON, MA)
DATE: 7403
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
DESC: THEORY
REPN: DNA 3597F ; VI 231
SUJO: 3-616-750 ; 4-232-000
TTTL: STUDY OF X-RAY EMISSION FROM LASER HEATED PLASMA (U), 44 P., (U)
TREE: 642

.block

DNA 3597F

.endblock

.block

copy: 1 id: 76843-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3609 1-383
AUTH: ROBERTS J.P. ; JORDAN T.M.
CLSS: C
CCDE: FOSTER III (PHOTON TRANSPORT) HDL
CORP: HARRY DIAMOND LABS. ; EXPERIMENTAL AND MATHEMATICAL PHYSICS
CONSULTANTS, INC.
DATE: 7506
DESC: THEORY

DESC: Radiation Transport gamma L1
SUJO: 9-620-000
SYMJ: JOINT EMP TECHNICAL MEETING (NEM 1973); PROCEEDINGS; VOL. 1
TITL: EFFECTS OF COHERENT SCATTERING AND POLARIZATION ON PHOTON FLUENCE
AND ABSORBEDDOSE IN THREE MODEL GEOMETRIES (U), 14 P., (C)

TREE: 960

.block

DNA 3609 1-383

.endblock

.block

copy: 1 id: 73598-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3609 3-451
AUTH: MEREWETHER D.E. ; EZELL T.F.
CLSS: U
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7506
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1

DESC: THEORY

EFFT: EMP

EMPF: 388 ; 251

SUJO: 3-259-400

SYMJ: JOINT EMP TECHNICAL MEETING (NEM 1973); PROCEEDINGS; VOL. 3,
INTERACTION AND COUPLING

TITL: INTERACTION OF CYLINDRICAL POSTS AND RADIATION INDUCED ELECTRIC
FIELD PULSES IN IONIZED MEDIA (U), 24 P., (U)

.block

DNA 3609 3-451

.endblock

.block

copy: 1 id: 73635-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3609 4-025
AUTH: SENGUPTA D.L. ; LIU Y-P.
CLSS: U
CORP: UNIVERSITY OF MICHIGAN (ANN ARBOR, MI)
DATE: 7506
DESC: THEORY
DESC: Simulation Facilities Techniques EMP L1
EMPF: 722
SUJO: 4-271-000
SYMJ: JOINT EMP TECHNICAL MEETING (NEM 1973)--PROCEEDINGS; VOL. 4,
SIMULATION TECHNOLOGY
TITL: TRANSIENT RADIATION FROM A STEP VOLTAGE EXCITED RESISTIVELY LOADED
LINEAR ANTENNA (U), 30 P., (U)

.block

DNA 3609 4-025

.endblock

.block

copy: 1 id: 73637-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3609 4-089
AUTH: KOURY D.C.
CLSS: U
CORP: NAVAL ORDNANCE LAB. (SILVER SPRING, MD)
DATE: 7506
DESC: Simulation Facilities Techniques EMP L1
DESC: EXPERIMENTAL TABULAR
EMPF: 713
SUJO: 4-271-000
SYMJ: JOINT EMP TECHNICAL MEETING (NEM 1973)--PROCEEDINGS; VOL. 4,
SIMULATION TECHNOLOGY
TITL: AIRBORNE MAPPING OF THE HORIZONTAL ELECTROMAGNETIC PULSE RADIATION
ENVIRONMENTSIMULATOR FOR SHIPS (EMPRESS) (U), 20 P., (U)

.block

DNA 3609 4-089

.endblock

.block

copy: 1 id: 73639-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3609 6-435
AUTH: SARGIS D.A. ; STEVENS C.A.
CLSS: U
CORP: SCIENCE APPLICATIONS, INC.
DATE: 7500
DESC: Radiation Transport gamma L1
DESC: THEORY
EMPF: 240
TSHO: HI-ALT
SUJO: 9-620-000
SYMJ: JOINT EMP TECHNICAL MEETING (NEM 1973) PROCEEDINGS; VOL. 6
TITL: CALCULATION OF HIGH ALTITUDE EMP SOURCES (U), 27 P., (U)

.block

DNA 3609 6-435

.endblock

.block

copy: 1 id: 73696-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3624F
AUTH: DUNN M.G. ; WURSTER W.H. ; TREANOR C.E.
CLSS: U
CONN: DNA 001 74 C 0220

CORP: CALSPAN CORP. (BUFFALO, NY)
DATE: 7508
DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L1
DESC: HAES ; THEORY EXPERIMENTAL
DESC: test instruments IR L1
REPN: DNA 3624F ; WB 5487 A 1
SUJO: 4-383-000 ; 4-820-000
TITL: RADIATION STUDIES OF METAL-OXYGEN MIXTURES (U), 48 P., (U)

.block

DNA 3624F

.endblock

.block

copy: 1 id: 76876-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3660T
AUTH: BRUNER A. ; BOGO V. ; HENDERSON E.A.
CLSS: U
CONN: DASA 01 70 C 0059 ; DNA 001 74 C 0098
CORP: LOVELACE FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH (ALBUQUERQUE,
NM)

DATE: 7507

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1 HIGH
DOSE RATES

DESC: EXPERIMENTAL

EFFT: GAMMA

REPN: DNA 3660T

SUJO: 3-312-100

TITL: DOSE-RATE EFFECTS OF 60 CO IRRADIATION ON PERFORMANCE AND PHYSIOLOGY
IN MONKEYS (U), 82 P., (U)

.block

DNA 3660T

.endblock

.block

copy: 1 id: 76912-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3663T
ADNO: A016675
AUTH: WATT T.M.
CLSS: U
CONN: DNA 001 74 C 0167
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA)
DATE: 7507
DESC: HAES PCA SID ; THEORY EXPERIMENTAL
DESC: Composition Chemistry Atmosphere Reaction Rates L1 ELECTRON
DENSITIES
REPN: DNA 3663T ; SRI PROJ. 3118 ; HAES 28
SUJO: 5-400-000

TITL: EFFECTIVE RECOMBINATION COEFFICIENT OF THE POLAR D-REGION UNDER
CONDITIONS OF INTENSE IONIZING RADIATION (U), 108 P., (U)

.block

DNA 3663T

.endblock

.block

copy: 1 id: 76916-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3680F 1

AUTH: PUTNAM S. ; HUFF R.

CLSS: CFRD

CONN: DNA 001 72 C 0176

CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA)

DATE: 7508

DESC: Simulation Facilities Techniques x-ray effects L1 GAMBLE II OWL II
CO2 LASER SNARLS

DESC: EXPERIMENTAL

DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1

DESC: Simulation Facilities Techniques EM propagation atmospheric
chemistry high-altitude phenomenolgy L1

REPN: DNA 3680F 1 ; PIFR 398 VOL. 1

SUJO: 3-616-750 ; 4-220-000 ; 4-231-000

TEMP: B0210 VOL. 1

TITL: ADVANCED CONCEPTS FOR PHOTON SOURCES; VOL. 1, INTRODUCTION AND
SUMMARY (U), 59P., (CFRD)

TREE: 642

.block

DNA 3680F 1

.endblock

.block

copy: 1 id: 76934-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3691 203

AUTH: HARTMAN E.F. ; EVANS D.C.

CLSS: SRD

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7500

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

DESC: EXPERIMENTAL

EFFT: EMP ; TREE ; INTEGRATED

EMPF: 393

SUJO: 3-221-000

SYMJ: PROCEEDINGS OF THE AEC/DNA TREE/SGEMP SYMPOSIUM, 14-17 JANUARY 1975

TITL: ELECTRICAL PULSE STRESSING OF TRANSISTORS IN IONIZING RADIATION (U),
10 P., (SRD)

TREE: 310

.block

DNA 3691 203

.endblock

.block

copy: 1 id: 73712-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3691 251

AUTH: WARNOCK F.E. ; SANFORD R.J.

CLSS: SRD

CORP: NAVAL SURFACE WEAPONS CENTER (SILVER SPRING, MD)

DATE: 7500

DESC: Nuclear Weapon Effects electronic subsystems computers memory L1

MEMORY

DESC: EXPERIMENTAL

EFFT: X-RAY ; TREE

SUJO: 3-212-000

SYMJ: PROCEEDINGS OF THE AEC/DNA TREE/SGEMP SYMPOSIUM, 14-17 JANUARY 1975

TITL: NUCLEAR RADIATION EFFECTS ON AMORPHOUS SEMICONDUCTORS (U), 11 P.,

(SRD)

TREE: 343

.block

DNA 3691 251

.endblock

.block

copy: 1 id: 73715-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3691 263

AUTH: RAYMOND J.P. ; POCOCK D.N. ; WONG T.Y.

CLSS: SRD

CONN: DNA 001 73 C 0154

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)

DATE: 7500

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: EXPERIMENTAL

EFFT: TREE

SUJO: 3-222-000

SYMJ: PROCEEDINGS OF THE AEC/DNA TREE/SGEMP SYMPOSIUM, 14-17 JANUARY 1975

TITL: PROSPECTS FOR RADIATION-HARDENED BIPOLAR INTEGRATED-INJECTION LOGIC

(U), 9 P.,(SRD)

TREE: 430

.block

DNA 3691 263

.endblock

.block

copy: 1 id: 73716-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3691 353
AUTH: SINGLETARY J.B. ; WINSLOW J.W.
CLSS: SRD
CORP: HUGHES AIRCRAFT CO. (CULVER CITY, CA)
DATE: 7500
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SUMMARY
EFFT: TREE
SUJO: 3-221-000
SYMJ: PROCEEDINGS OF THE AEC/DNA TREE/SGEMP SYMPOSIUM, 14-17 JANUARY 1975
TITL: RADIATION HARDNESS ASSURANCE FOR BIPOLAR TRANSISTORS (U), 6 P.,
(SRD)

TREE: 610

.block

DNA 3691 353

.endblock

.block

copy: 1 id: 73724-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3691 399
AUTH: FLANAGAN T.M.
CLSS: SRD
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7500
DESC: Nuclear Weapon Effects electronic pieceparts measuring devices
sensors detectors L1
DESC: SURVEY
EFFT: TREE
SUJO: 3-224-000
SYMJ: PROCEEDINGS OF THE AEC/DNA TREE/SGEMP SYMPOSIUM, 14-17 JANUARY 1975
TITL: CONSIDERATION OF THE EFFECTS OF SATELLITE RADIATION ENVIRONMENT ON
ATOMIC FREQUENCY STANDARDS (U), 10 P., (SRD)

TREE: 367

.block

DNA 3691 399

.endblock

.block

copy: 1 id: 73729-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3691 477
AUTH: EVANS D.C. ; MCKENZIE J.M.
CLSS: SRD
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7500
DESC: SUMMARY
DESC: Nuclear Weapon Effects ordnance bombs mines warheads nuclear L1
EFFT: TREE

SUJO: 3-161-100
SYMJ: PROCEEDINGS OF THE AEC/DNA TREE/SGEMP SYMPOSIUM, 14-17 JANUARY 1975
TITL: HIGH RELIABILITY RADIATION HARD SWITCHES (U), 6 P., (SRD)
TREE: 420

.block

DNA 3691 477

.endblock

.block

copy: 1 id: 73735-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3693F 1
AUTH: VAN LINT V.A.J.
CLSS: S
CONN: DNA 001 73 C 0163
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7408
DESC: SUMMARY SURVEY
DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability
L1 TREE ASSESSMENT OF SOVIET TECHNOLOGY

REPN: DNA 3693F 1 ; INTEL RT 8047 030S

SUJO: 4-170-000

TEMP: B1887

TITL: ANALYSIS OF TRANSIENT RADIATION EFFECTS OF ELECTRONIC SYSTEMS
(TREE); VOL. 1, TECHNICAL DISCUSSION (U), 48 P., (S)

TREE: 100

.block

DNA 3693F 1

.endblock

.block

copy: 1 id: 76949-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3700F
ADNO: C007067
AUTH: WILSON H.L. ; POMRANING G.C. ; LATKO R.J. ; CIPLICKAS A.J. ;
ENGEBRETSON A.C.

CLSS: CRD

CCDE: DRAGNET (X RAY TRANSPORT ; WEAPON OUTPUT) SAI

CONN: DNA 001 74 C 0002

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)

DATE: 7412

DESC: Radiation Transport x-ray L1

DESC: THEORY

REPN: DNA 3700F ; SAI 74 679 LJ

SUJO: 9-640-000

TEMP: B2225

TITL: MODIFICATIONS AND IMPROVEMENTS TO THE DRAGNET CODE (U), 148 P.,
(CRD)

TREE: 980

.block

DNA 3700F

.endblock

.block

copy: 1 id: 76956-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3729 3

ABS: For a general review of this series, see summary of Volume I on a-2-6. Volume III specifically provides an overview of the Brigade Survivability Model (BSM). It identifies the types of inputs required to operate the model, the exercises performed by the model, and the output *produced by the model. The key elements or sub-models of the BSM are as follows: acquired target list model (ATLM), weapon allocation model (ALGM), weapon air point model (WAPM), weapons effects model (WEM), and damage calculation model (DCM). The BSM also includes a routine for surveying detailed damage to the brigade in terms of target type, combat units, and functional areas affected by the nuclear attack as a function of time and nuclear resources. A listing and description of the targets used in the study is provided.

ABS: The model results are presented in terms of an overview of the damage to the brigade, including the fraction of the combat units damaged to specified levels by each type of weapon effect (blast, thermal, nuclear radiation, and EMP) and the brigade functional areas destroyed per combat phase.

ADNO: B010335L

AUTH: LIEU B. ; MCGAHAN J.T. ; MIERCORT F.A. ; PHILLIPS J. ; SCHILLING W.R.

CLSS: U

CCDE: BSM (TACTICAL GAMING) SAI

CONN: DNA 001 75 C 0012

CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA)

DATE: 7512

DESC: Nuclear Warfare Theater Survivability Security Safety L1

DESC: Nuclear Warfare Theater models simulation L1

REPN: DNA 3729F 3 ; SAI 1 151 00 281 00

SUJO: 3-412-100 ; 3-412-900

TITL: ANALYSIS OF BRIGADE SURVIVABILITY; VOL. 3, BRIGADE SURVIVABILITY MODEL (U), 76P., (U)

TNFF: 5710 ; 5610

.block

DNA 3729 3

.endblock

.block

copy: 1 id: 76989-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3729 4

ABS: The following areas, related to the TNF S2 program, are addressed in

this report: tactical nuclear environments and target response;
tissue dose model; personnel incapacitation from nuclear radiation;
thermal radiation environment; response to thermal radiation;
response to air blast; EMP effects; and overview of target
vulnerability to weapon effects.

ADNO: C005648
AUTH: MCGAHAN J.T. ; GROCE D.E. ; KAUL D. ; LATKO R.
CLSS: S
CONN: DNA 001 75 C 0012
CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA)
DATE: 7512
DESC: Nuclear Warfare Theater operations scenarios battlefield environment

L1

DESC: Nuclear Weapon Effects on animals blast shock L1 SURVEY VALUES
DESC: SURVEY
DESC: Nuclear Weapon Effects on animals thermal L1 SURVEY VALUES
DESC: Nuclear Weapon Effects on animals ionizing radiation L1 SURVEY
VALUES

DESC: Target Analysis military forces L1
DESC: Nuclear Warfare Theater Survivability Security Safety L1
REPN: DNA 3729F 4 ; SAI 1 151 00 281 00
SUJO: 3-311-000 ; 3-312-000 ; 3-313-000 ; 3-411-200 ; 3-412-100 ;
3-432-000
TEMP: B1106 VOL. 4 ; B1790 (MF)
TITL: ANALYSIS OF BRIGADE SURVIVABILITY; VO6. 4, TACTICAL NUCLEAR
ENVIRONMENTS AND TARGET RESPONSE (U), 122 P., (S)
TNFF: 4825 ; 5710

.block

DNA 3729 4

.endblock

.block

copy: 1 id: 76990-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3732F

ABS: The objectives of this program were to independently review the
analysis of thermal radiation test data performed by Kaman Sciences,
Inc., and to identify the probable causes for the excessively large
scatter in the values of the thermal fraction deduced from the test
measurements. The results of our review are not identical to, but
are consistent with, the results obtained by Kaman. The large
scatter in the experimental observations, presumably due to real
physical effects not accounted for in either of these analyses,
precludes the derivation of a precise and defensible scaling law for
the thermal fraction. The more important physical effects
responsible for these uncertainties are identified as variations in
the aerosol content of the atmosphere and perturbation of the
thermal pulse by the arrival of the ground reflected shock wave.
These effects require a more detailed study.

ADNO: C009246L
AUTH: JOHNSON B.W. ; OLD C.C.
CLSS: SRD

CCDE: RHGEN (RAD HYDRO) SAI
CONN: DNA 001 73 C 0136
CORP: SCIENCE APPLICATIONS, INC. (PALO ALTO, CA)
DATE: 7410
DESC: Nuclear Weapon Environment Thermal Output source strength total
intensity L1 EFFECT OF HEAVY CASES ON SCALING
DESC: Nuclear Weapon Phenomenology Fireball Chemistry L1 EFFECT OF METAL
OXIDES ON THERMAL OUTPUT
DESC: USES DATA FROM MANY SHOTS THE DATA BEING EXTRACTED FROM WELLS (DNA
2500) ; SURVEY
DESC: Nuclear Weapon Environment Thermal Output rate L1 EFFECT OF HEAVY
CASES ON SCALING
REPN: DNA 3732F ; SAI 72 215 PA
TSHO: LOW-ALT
SUJO: 1-210-000 ; 1-240-000 ; 2-160-000
TEMP: B3008 (3 COPIES)
TITL: FACTORS AFFECTING THERMAL RADIATION ENVIRONMENTS (U), 73 P., (SRD)
TNFF: 4840

.block

DNA 3732F

.endblock

.block

copy: 1 id: 76994-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3744F
AUTH: GREEN D.W. ; GABELNICK S.D. ; REEDY G.T.
CLSS: U
CONN: DNA IACRO 75 802
CORP: ARGONNE NATIONAL LAB. (ARGONNE, IL)
DATE: 7508
DESC: EXPERIMENTAL
DESC: test instruments EM propagation atmospheric chemistry L5
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1
REPN: DNA 3744F
SUJO: 2-214-000 ; 4-320-000 ; 4-820-600
TITL: FINE DEFINITION OF IR SPECTRA FROM HIGH TEMPERATURE INTERACTIONS OF
U + O2--PART II (U), 26 P., (U)

.block

DNA 3744F

.endblock

.block

copy: 1 id: 77006-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3750F
AUTH: STEINMAN D.K. ; HARRIS L. JR. ; FRIESENHAHN S.J. ; YOUNG J.C. ;

LURIE N.A. ; BRYAN D.E. ; GOBER W.E.

CLSS: U
CONN: DNA 00173 C 0259
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7506
DESC: Nuclear Weapon Effects missile systems ABM electronics L1
DESC: test instruments nuclear radiation neutron L1
DESC: SIMULATION (LINAC) ; THEORY EXPERIMENTAL
DESC: test instruments nuclear radiation gamma L1
EFFT: TREE
REPN: DNA 3750F ; INTEL RT 8093 017
SUJO: 3-112-230 ; 4-341-000 ; 4-342-000
SYST: SPRING
TITL: TIME-DEPENDENT MEASUREMENTS OF NEUTRON-INDUCED SILICON DOSE RATES IN
A MISSILEGUIDANCE SYSTEM (U), 252 P., (U)
TREE: 392 ; 651 ; 652

.block

DNA 3750F

.endblock

.block

copy: 1 id: 77012-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3753F
AUTH: LURIE N.A. ; HARRIS L. JR. ; YOUNG J.C.
CLSS: U
CONN: DNA 001 72 C 0020
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7505
DESC: EXPERIMENTAL TABULAR
DESC: test instruments nuclear radiation gamma L1
REPN: DNA 3753F ; INTEL RT 8013 005
SUJO: 4-341-000
TITL: CALCULATION OF GAMMA-RAY RESPONSE MATRIX FOR 5-CM NE-213 ORGANIC
LIQUID SCINTILLATION DETECTOR (U), 152 P., (U)
TREE: 651

.block

DNA 3753F

.endblock

.block

copy: 1 id: 77013-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3754F
AUTH: HARRIS L. JR. ; YOUNG J.C. ; BRYAN D.E. ; LURIE N.A. ; STEINMAN D.K.
; GOBER W.E. ; SCHANZLER L.
CLSS: U
CONN: DNA 001 72 C 0020
CORP: INTELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7506

DESC: test instruments nuclear radiation neutron L1
DESC: EXPERIMENTAL
DESC: Cross Sections neutron L1
REPN: DNA 3754F ; INTEL RT 8013 006
SUJO: 4-342-000 ; 9-820-000
TITL: INTEGRAL MEASUREMENTS TO TEST NEUTRON SCATTERING AND GAMMA-RAY
PRODUCTION CROSS SECTIONS FOR BE, C, N, H2O, AND FE (U), 304 P., (U)
TREE: 652 ; 412

.block

DNA 3754F

.endblock

.block

copy: 1 id: 77014-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3763F
AUTH: STRAKER E.A. ; ALLEN L.C. ; GRAHAM K.D.
CLSS: SRD CNWDI
CCDE: IDEA (WEAPON RADIATION) SAI ; LAMB ; KN FIRE ; DECRE
CONN: DNA 001 73 C 0015
CORP: SCIENCE APPLICATIONS, INC. (HUNTSVILLE, AL)
DATE: 7505
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L1
DESC: Nuclear Weapon Environment X-ray Output source strength total
intensity L1
DESC: Nuclear Weapon Environment Prompt Neutron source strength total
fluence L1
DESC: TABULAR
DESC: Nuclear Weapon Environment radiation decay gamma decay L1
DESC: Nuclear Weapon Environment Initial Gamma source strength total
intensity L1
DESC: Nuclear Weapon Environment Initial Gamma energy spectrum L1
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L1
DESC: Nuclear Weapon Phenomenology High-Altitude debris coupling
distribution energy spectrum L1
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L1
DESC: Nuclear Weapon Environment X-ray Output energy spectrum L1
REPN: DNA 3763F ; SAI 76 214 HU
TSHO: LOW-ALT ; MULTIPLE
SOCE: XXXXXXXXXX SPRINT
SUJO: 1-110-000 ; 1-120-000 ; 1-610-000 ; 1-620-000 ; 1-710-000 ;
1-720-000 ; 2-130-000 ; 2-211-000 ; 2-223-200 ; 2-223-420
TEMP: B0874
TITL: IDEA -AN INTEGRATED DOSE ENVIRONMENT ANALYSIS CODE FOR NUCLEAR
WEAPONS EFFECTS(U), 82 P., (SRD CNWDI)
TREE: 900

.block

DNA 3763F

.endblock

.block

copy: 1 id: 77023-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3776F
AUTH: RAYMOND J.P. ; WONG T.Y. ; ASHE J.E. ; PERKINS C.W.
CLSS: U
CONN: DNA 001 73 C 0154
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7506
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
INTEGRATED ON P 147
EFFT: EMP ; TREE ; INTEGRATED
REPN: DNA 3776F ; NRTC 75 32 R
SUJO: 3-222-000
TTTL: STUDY OF RADIATION EFFECTS IN BULK CMOS MICROCIRCUITS, I2 L/LSI
LOGIC CELLS AND OPTICAL COUPLERS (U), 202 P., (U)
TREE: 325

.block
DNA 3776F

.endblock

.block

copy: 1 id: 77038-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3782F
AUTH: SEARS R.D.
CLSS: U
CONN: DNA 001 75 C 0098
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7509
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: HAES ICECAP EXCEDE ; EXPERIMENTAL
REPN: DNA 3782F ; LMSC D460783 ; HAES 29
SUJO: 4-820-600 ; 5-738-000
TTTL: IONOSPHERIC IRREGULARITIES--HAES PROGRAM SUPPORT; HAES REPORT NO. 29
(U), 74 P., (U)

.block
DNA 3782F

.endblock

.block

copy: 1 id: 77044-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3783F

AUTH: MCCORMAC B.M.
CLSS: U
CONN: DNA 001 75 C 0084
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7509
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: SUMMARY
DESC: Meteorology L1
DESC: Composition Chemistry Atmosphere Reaction Rates L1
REPN: DNA 3783F ; LMSC D462084
SUJO: 5-400-000 ; 5-500-000 ; 5-800-000
TITL: SUMMARY OF INSTITUTE PROCEEDINGS, MAGNETOSPHERIC PARTICLES AND
FIELDS (U), 30 P., (U)

.block

DNA 3783F

.endblock

.block

copy: 1 id: 77045-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3785F
AUTH: TARR P.W. ; ARCHER D.H.
CLSS: U
CONN: DNA 001 74 C 0143
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7509
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1
DESC: radio microwave propagation abnormal conditions auroral disturbances
sudden ionospheric disturbances SID polar cap absorptions PCA solar
eclipse L1
DESC: HAES ICECAP ; THEORY EXPERIMENTAL
REPN: DNA 3785F ; MRC R 211 ; HAES 24
SUJO: 2-214-000 ; 4-820-600 ; 5-738-000
TITL: AURORAL SIMULATION STUDIES IN SUPPORT OF ICECAP AND EXCEDE; HAES
REPORT NO. 24(U), 158 P., (U)

.block

DNA 3785F

.endblock

.block

copy: 1 id: 77047-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3789F
ADNO: A028370
AUTH: KOFSKY I.L. ; SLUDER R.B. ; TROWBRIDGE C.A.
CLSS: U

CONN: DNA 001 75 C 0085
CORP: PHOTOMETRICS, INC. (LEXINGTON, MA)
DATE: 7510
DESC: Emission Spectra of the Atmosphere L1
DESC: HAES ICECAP ; EXPERIMENTAL
DESC: Nuclear Test Simulation Field Programs experiment design optical
radiation experiments UV visible IR L1
REPN: DNA 3789F ; PHM 05 76 ; HAES 27
SUJO: 4-820-600 ; 5-600-000
TITL: DATA REDUCTION AND AURORAL CHARACTERIZATIONS FOR ICECAP II (U), 136
P., (U)

.block

DNA 3789F

.endblock

.block

copy: 1 id: 77051-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3812F
AUTH: SCHAIPLY J.
CLSS: CRD
CCDE: VERA (RADIATION HYDRO ; OUTPUT) S3
CONN: DNA 001 73 C 0036
CORP: SYSTEMS, SCIENCE AND SOFTWARE (LA JOLLA, CA)
DATE: 7503
DESC: Radiation Transport x-ray L1
DESC: THEORY
REPN: DNA 3812F ; SSS CR 75 2596
SUJO: 9-640-000
TEMP: B1774
TITL: MODIFICATIONS TO THE 2D VERA CODE (U), 78 P., (CRD)
TREE: 980

.block

DNA 3812F

.endblock

.block

copy: 1 id: 77074-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3819F
ADNO: A025026
AUTH: HUSZAR L. ; WOOLSON W.A.
CLSS: U
CCDE: ATR-3 (RAD TRANSPORT) SAI
CONN: DNA 001 74 C 0027
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)
DATE: 7507
DESC: Radiation Transport neutron L1
DESC: Radiation Transport x-ray L1
DESC: Radiation Transport gamma L1

DESC: THEORY TABULAR
REPN: DNA 3819F ; SAI 75 585 LJ
TSHO: SURFACE ; LOW-ALT
SUJO: 9-620-000 ; 9-640-000 ; 9-650-000
TITL: VERSION 3 OF AIR TRANSPORT OF RADIATION (ATR) (U), 72 P., (U)
TREE: 950

.block

DNA 3819F

.endblock

.block

copy: 1 id: 77082-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3829F

ABS: Effects of terrain on prompt dose to personnel are determined from representative tactical nuclear weapons. Terrain features considered include forest cover, topography, and small bodies of water. Calculations with both idealized and real topography were performed for a region in central Germany. A parameterization of idealized terrain features was derived.

ADNO: A025027

AUTH: ALBERT T.E. ; STRAKER E.A. ; GRAHAM D.S. ; GRITZNER M.L.

CLSS: U

CCDE: DOTSAI (RADIATION TRANSPORT) SAI ; MORSE (RAD TRANSPORT) ORNL

CONN: DNA 001 75 C 0055

CORP: SCIENCE APPLICATIONS, INC. (HUNTSVILLE, AL)

DATE: 7507

DESC: TACTICAL APPLICATIONS ; TABULAR

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
NEUTRON GAMMA

REPN: DNA 3829F ; SAI 76 557 HU

TSHO: LOW-ALT

SUJO: 3-312-100

TITL: TERRAIN EFFECTS ON PROMPT TACTICAL NUCLEAR RADIATION ENVIRONMENTS
(U), 108 P.,(U)

TNFF: 4850

.block

DNA 3829F

.endblock

.block

copy: 1 id: 77093-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3830F

AUTH: SCOTT W.H. JR. ; READ P.A. ; KAUL D.C. ; DIETZ R.E.

CLSS: U

CCDE: MORSE (RADIATION TRANSPORT) SAI

CONN: DNA 001 73 C 0258

CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)

DATE: 7509

DESC: Nuclear Weapon Effects missile systems ABM electronics L1
DESC: Radiation Transport neutron L1
DESC: EXPERIMENTAL TABULAR
EFFT: TREE
REPN: DNA 3830F ; SAI 75 639 LJ
SUJO: 3-112-230 ; 9-650-000
SYST: SPRINT
TTTL: IN-MISSILE CALCULATIONS OF SILICON DOSE--A COMPARISON WITH
EXPERIMENT (U), 108P., (U)
TREE: 392

.block

DNA 3830F

.endblock

.block

copy: 1 id: 77094-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3849T
ADNO: C006301
AUTH: SAPPENFIELD D.S.
CLSS: SRD
CONN: DNA 001 74 C 0212
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7510
DESC: Nuclear Weapon Environment Ultraviolet Output energy spectrum L1
DESC: TABULAR
DESC: Nuclear Weapon Phenomenology High-Altitude induced airglow
fluorescence L1
REPN: DNA 3849T ; MRC R 220
TSHO: HI-ALT
SUJO: 1-520-000 ; 2-214-000
TEMP: B1626
TTTL: ULTRAVIOLET RADIATION RATE CONSTANTS AND YIELDS FOR HIGH ALTITUDE
NUCLEAR EXPLOSIONS (U), 40 P., (SRD)

.block

DNA 3849T

.endblock

.block

copy: 1 id: 77134-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3860F
ABS: This analysis investigated the value of enhanced radiation (ER)
weapons and clean suppressed radiation (CSR) weapons in tactical
applications. It included assessments of the value of these types of
weapons in use against tactical targets, considerations of
collateral damage as they may constrain tactical use, and
improvements in the modeling of weapons effects. Estimates of the
current and projected state of the art in ER and CSR device
technology are provided and new technologies in delivery systems are

considered. In particular, the ability to package an ER or CSR weapon in the Lance delivery vehicle is considered together with the possible improvements in weapon accuracy made available by new guidance technology. The potential employments of interest are against tactical targets near the forward edge of the battle area (FEBA) during nuclear land combat in Central Europe.

ABS: The principal approach in the study is to set forth a variety of targets that are particularly relevant to the use of ER or CSR weapons and then to compare their utility with standard fission weapons in attacking the same target. The troop targets for ER weapons are representative of stationary and moving targets and of other factors that give breadth to the analysis. The class of targets for CSR targets was found to be considerably restricted.

ADNO: C005936

AUTH: LEAKE L.A. ; PHILLIPS J.P. ; MCGAHAN J.T. ; HUDSON C.I. JR. ; SMITH C.A. ; COCKAYNE J.E.

CLSS: SRD CNWDI

CCDE: ATR ; TDM ; DAEDALUS

CONN: DNA 001 75 C 0113

CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA)

DATE: 7512

DESC: ENHANCED RADIATION AND CLEAN SUPPRESSED RADIATION WEAPONS COMPARED ; THEORY

DESC: Nuclear Warfare Target Analysis system studies standoff criteria safe separation distances lethal radii L1

DESC: Nuclear weapon basic design L1 TAILORED WEAPON DEVELOPMENT

DESC: Nuclear Weapon Effects on animals ionizing radiation L5 PERSONNEL

DESC: Nuclear Weapon Effects structures aboveground cities L1 COLLATERAL DAMAGE

DESC: Nuclear Weapon Effects land transport armored vehicles L1 TANK BATTALION

DESC: Nuclear Warfare Theater systems nuclear devices L1

DESC: Nuclear Warfare Theater collateral damage bonus damage L1

DESC: Nuclear Weapon Effects structures aboveground models spheres domes arches L1 BRIDGES

DESC: Nuclear Weapon Effects structures field fortifications L5 DEFILES

EFFT: NEUTRON ; THERMAL ; AIR-BLAST ; INTEGRATED

REPN: DNA 3860F ; SAI 75 244 WA

TSHO: SURFACE ; UW ; LOW-ALT

SUJO: 3-140-000 ; 3-151-000 ; 3-252-000 ; 3-259-100 ; 3-312-000 ; 3-412-500 ; 3-413-300 ; 3-431-000 ; 4-831-000

SYST: LANCE ; PERSHING

TEMP: B1385

TITL: VALUE OF SPECIAL WEAPONS IN TACTICAL NUCLEAR OPERATIONS (U), 202 P., (SRD CNWDI)

TNFF: 4820

.block

DNA 3860F

.endblock

.block

copy: 1 id: 77144-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3887
AUTH: TAMOR S. ; ENGBRETSON A.C.
CLSS: U
CCDE: LION (LASER -HEATED PLASMA) SAI
CONN: DNA 001 74 C 0078
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)
DATE: 7410
DESC: THEORY
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
DESC: Simulation Facilities Techniques x-ray effects L1
REPN: DNA 3887F ; SAI 74 C 643 LJ
SUJO: 3-616-750 ; 4-232-000
TITL: STUDIES IN THE DYNAMICS AND RADIATION OF LASER HEATED PLASMAS (U),
48 P., (U)
TREE: 642

.block

DNA 3887

.endblock

.block

copy: 1 id: 77172-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3888F
AUTH: HOFFMAN A.L.
CLSS: U
CONN: DNA 001 74 C 0006
CORP: MATHEMATICAL SCIENCES NORTHWEST, INC. (BELLEVUE, WA)
DATE: 7410
DESC: THEORY EXPERIMENTAL
DESC: Directed Energy Weapons Lasers Applications High-intensity radiation
field generation L1
DESC: Simulation Facilities Techniques x-ray effects L1
REPN: DNA 3888F
SUJO: 3-616-750 ; 4-230-000
TITL: LASER HEATING OF MAGNETICALLY CONFINED PLASMAS FOR X-RAY PRODUCTION,
PHASE II (U), 132 P., (U)
TREE: 642

.block

DNA 3888F

.endblock

.block

copy: 1 id: 77173-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3891T
ABS: This report contains a description of a tactical nuclear ground
effects computer code (TANGE) that has been developed to predict
environments of prompt nuclear radiation, fission product gamma
radiation, blast parameters, and thermal environments. Descriptions

of the output from various generic type nuclear weapons having probable tactical application are included. Uncertainties in such calculations have been addressed.

ADNO: C009403
AUTH: BUTLER G. JR.
CLSS: SRD CNWDI
CCDE: TRAX (THERMAL TRANSPORT)
CONN: DNA 001 75 C 0116
CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO)
DATE: 7511
DESC: Nuclear Weapon Environment Thermal Output source strength total intensity L1
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L1
DESC: EXPERIMENTAL TABULAR
DESC: Nuclear Weapon Environment Airblast static overpressure L1 TACTICAL DEVICES
DESC: Nuclear Weapon Environment Initial Gamma energy spectrum L1
DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
REPN: DNA 3891T ; K 75 392 (R)
TSHO: LOW-ALT
SOCE: MACE II
SUJO: 1-120-000 ; 1-210-000 ; 1-720-000 ; 2-611-000 ; 3-312-100
TEMP: B3019
TITL: TACTICAL NUCLEAR WEAPONS ENVIRONMENTS COMPUTER CODE (U), 124 P., (SRD CNWDI)
TNFF: 4825
TREE: 910 ; 920
.block
DNA 3891T
.endblock
.block
copy: 1 id: 77176-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: DNA 3893T
ADNO: C009217
AUTH: COTTER L.D.
CLSS: S
CONN: DNA 001 75 C 0096
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7510
DESC: BIBLIOGRAPHY
DESC: Nuclear Weapon Effects electronic pieceparts L1 RUSSIAN LITERATURE
REPN: DNA 3893T ; INTEL RT 8047 030S ADD
SUJO: 3-220-000
TEMP: B2918 ; B3304 (MF)
TITL: ANALYSIS OF TRANSIENT RADIATION EFFECTS OF ELECTRONIC SYSTEMS (TREE); UPDATE I(U), 48 P., (S)
TREE: 150
.block
DNA 3893T
.endblock

.block

copy: 1 id: 77177-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3901F
ADNO: C009434
AUTH: WILSON H.L. ; CIPLICKAS A.J. ; POMRANING G.C.
CLSS: SRD
CCDE: DRAGNET (WEAPON OUTPUT, RADIATION HYDRO) SAI
CONN: DNA 001 73 C 0050
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)
DATE: 7310
DESC: Fluid Mechanics hydrodynamics L1
DESC: THEORY CODE
DESC: Radiation Transport x-ray L1
REPN: DNA 3901F ; SAI 73 227 LJ
SUJO: 9-410-000 ; 9-640-000
TEMP: B3045
TITL: THEORETICAL AND NUMERICAL RADIATION HYDRODYNAMICS (U), 394 P., (SRD)
TREE: 980

.block

DNA 3901F

.endblock

.block

copy: 1 id: 77194-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3941T
AUTH: FLANAGAN T.M. ; BLOOM G.E. ; LEADON R.E. ; JURIST S.L.
CLSS: SRD
CONN: DNA 001 75 C 0247
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7510
DESC: THEORY
DESC: Nuclear Weapon Effects space systems spacecraft or satellites
electronics L1
EFFT: TREE
REPN: DNA 3941T ; INTEL RT 8128 006S
SUJO: 3-114-300
TEMP: B2583
TITL: RADIATION HARDENING OF SATELLITE TIMERS--DESIGN TRADEOFFS AND
GUIDELINES (U), 166 P., (SRD)
TREE: 393 ; 367

.block

DNA 3941T

.endblock

.block

copy: 1 id: 77227-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3964 09
ADNO: A047867
AUTH: MICHELET A.H.
CLSS: U
CCDE: ROSCOE (ATMOSPHERIC IONIZATION, EMISSIONS) MRC
CONN: DNA 001 74 C 0182
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7412
DESC: TABULAR CODE
DESC: Nuclear Weapon Environment Visible Output rate L1
DESC: Nuclear Weapon Environment Ultraviolet Output rate L1
DESC: Nuclear Weapon Environment Infrared Output rate L1
REPN: DNA 3964F 9 ; MRC R 168
SUJO: 1-340-000 ; 1-440-000 ; 1-540-000
TTTL: ROSCOE MANUAL; VOL. 9, LOW-ALTITUDE FIREBALL THERMAL AND UV
RADIATION MODELS (U), 82 P., (U)

.block

DNA 3964 09

.endblock

.block

copy: 1 id: 77265-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 3964 15
ADNO: A047570
AUTH: LOWEN R.W. ; SMITH C.A.
CLSS: U
CCDE: ROSCOE
CONN: DNA 001 74 C 0182
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)
DATE: 7506
DESC: Magnetic Fields Electric Currents in the Upper Atmosphere Trapped
Radiation Particle Fluxes Space Radiation L1
DESC: THEORY TABULAR CODE
REPN: DNA 3964F 15 ; SAI 75 609 LJ 3
SUJO: 5-800-000
TTTL: ROSCOE MANUAL; VOL. 15, AMBIENT GEOMAGNETIC FIELD (U), 70 P., (U)

.block

DNA 3964 15

.endblock

.block

copy: 1 id: 77275-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 1-075
AUTH: YANG L.C. ; VARSI G.
CLSS: SRD
CORP: CALIFORNIA INSTITUTE OF TECHNOLOGY, JET PROPULSION LAB. (PASADENA,

CA)

DATE: 7510
DESC: SIMULATION (CO 60)
DESC: Nuclear Weapon Effects ordnance electroexplosive devices fuses L1
DESC: Directed Energy Weapons Lasers Effects Explosives Munitions L5
EFFT: GAMMA
SUJO: 3-162-000 ; 3-613-180
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEM; VOL. 1, SESSIONS 1 AND 2
TITL: NUCLEAR RADIATION EFFECTS ON LASER EXPLOSIVE INITIATION SYSTEM (U),
24 P., (SRD)
TREE: 397

.block

DNA 4032 1-075

.endblock

.block

copy: 1 id: 73748-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 1-101
AUTH: GEHMAN S.E. ; HOLMES A.B.
CLSS: SRD
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7510
DESC: Nuclear Weapon Effects electrical mechanical fluidic devices L1
DESC: SIMULATION (AURORA-HFX)
EFFT: X-RAY
SHOT: DINING CAR
SUJO: 3-234-000
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEM; VOL. 1, SESSIONS 1 AND 2
TITL: RESULTS OF RADIATION EFFECTS SIMULATION AND UNDERGROUND TESTING OF
FLUIDIC DEVICES (U), 64 P., (SRD)
TREE: 350

.block

DNA 4032 1-101

.endblock

.block

copy: 1 id: 73749-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 1-183
AUTH: POSEY L.D. ; TOLLEFSRUD P.B. ; WALKER J.V. ; BURCHETT O.L. ;
BUCKALEW W.H. ; DUGAN D.W.
CLSS: SRD
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7510
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1 ACPR SPR2 SPR3
DESC: Simulation Facilities Techniques x-ray effects L1 HERMES 2 REBA

REHYD HYDRA

SUJO: 4-230-000 ; 4-241-000
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEM; VOL. 1, SESSIONS 1 AND 2
SYST: MK4/W-76
TITL: NUCLEAR EFFECTS SIMULATION AT SANDIA (U), 22 P., (SRD)
TREE: 642

.block

DNA 4032 1-183

.endblock

.block

copy: 1 id: 73751-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 2-019
AUTH: SHEA J. ; CASE J. ; BEALE G.A.
CLSS: SRD
CONN: F 04611 74 C 0038
CORP: PHYSICS INTERNATIONAL CO. (SAN LEANDRO, CA) ; AIR FORCE ROCKET
PROPULSION LAB.(EDWARDS AFB, CA)

DATE: 7510
DESC: TITANIUM MOTOR CASE DEBONDING ; EXPERIMENTAL
DESC: Nuclear Weapon Effects missile systems strategic propulsion L1
DESC: Nuclear Weapon Effects missile systems ABM propulsion L1
EFFT: X-RAY
SHOT: DINING CAR ; HUSKY PUP
SUJO: 3-112-140 ; 3-112-240
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 2, SESSIONS 3 AND 4
TITL: NUCLEAR RADIATION EFFECTS ON MOTORCASE INSULATOR BONDS (U), 13 P.,
(SRD)

.block

DNA 4032 2-019

.endblock

.block

copy: 1 id: 73757-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 2-059
AUTH: LACETERA J.E. ; GURTMAN G.A. ; RICE M. ; SIMS E. ; CECIL R.
CLSS: SRD
CCDE: TINC (MATERIALS RESPONSE) SSS
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD) ; SYSTEMS,
SCIENCE AND SOFTWARE (LA JOLLA, CA)

DATE: 7510
DESC: Nuclear Weapon Effects missile systems ABM materials L1 3DQP
EFFT: X-RAY
SUJO: 3-112-220
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 2, SESSIONS 3 AND 4

TITL: COUPLED FRONT-SURFACE PHYSICS, WAVE PROPAGATION CODE FOR RESPONSE OF
COMPOSITE MATERIALS TO RADIATION (U), 23 P., (SRD)

.block

DNA 4032 2-059

.endblock

.block

copy: 1 id: 73759-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 2-143

AUTH: LACETERA J.

CLSS: SRD

CCDE: DTFALL (X-RAY TRANS) ; FOX (X-RAY TRANS) ; OGRE ; FLAIR (X-RAY
TRANS) ; DART (X-RAY TRANS) ; THUNDERBALL (X-RAY TRANS)

CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)

DATE: 7510

DESC: Radiation Transport x-ray L1

SUJO: 9-640-000

SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 2, SESSIONS 3 AND 4

TITL: UNVERTAINTIES IN THE ATMOSPHERIC TRANSPORT OF X-RAYS RELATED TO
UNCERTAINTIES IN MATERIAL RESPONSE (U), 16 P., (SRD)

.block

DNA 4032 2-143

.endblock

.block

copy: 1 id: 73762-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 3-053

AUTH: DAVIES F.W. ; SHRADER J.E.

CLSS: SRD

CONN: F 04701 74 C 0218

CORP: BOEING CO. (SEATTLE, WA)

DATE: 7510

DESC: Nuclear Weapon Effects ordnance explosives L1 LEAD AZIDE TYPES RD
1333, PUA, AND DEXTRINATED

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

EFFT: X-RAY

SUJO: 3-163-000

SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 3, SESSIONS 5 AND 6

TITL: RADIATION INDUCED CONDUCTIVITY OF LEAD AZIDE (U), 30 P., (SRD)

.block

DNA 4032 3-053

.endblock

.block

copy: 1 id: 73771-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 3-085
AUTH: HAYS S.D. ; SEAY G.E.
CLSS: SRD
CONN: F 04701 74 C 0212
CORP: SYSTEMS, SCIENCE AND SOFTWARE (LA JOLLA, CA)
DATE: 7510
DESC: Nuclear Weapon Effects ordnance explosives L1 LEAD AZIDE RD-1333
SHOT: DIDO QUEEN ; DIAMOND SCULLS
SUJO: 3-163-000
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 3, SESSIONS 5 AND 6
SYST: MM
TITL: RADIATION INDUCED ELECTRIC FIELD INITIATION OF LEAD AZIDE (U), 46
P., (SRD)

.block

DNA 4032 3-085

.endblock

.block

copy: 1 id: 73772-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4032 3-271
AUTH: WARD J.R. ; ROCCHIO J.J.
CLSS: SRD
CORP: BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)
DATE: 7510
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects ordnance explosives L1 AMMONIUM PERCHLORATE
EFFT: NEUTRON
SUJO: 3-163-000
SYMJ: PROCEEDINGS OF FIFTH SYMPOSIUM, NUCLEAR SURVIVABILITY OF PROPULSION
AND ORDNANCE SYSTEMS; VOL. 3, SESSIONS 5 AND 6
TITL: EFFECT OF NEUTRON RADIATION ON THE VAPORIZATION OF AMMONIUM
PERCHLORATE--A COMBUSTION RELATED PROCESS (U), 9 P., (SRD)

.block

DNA 4032 3-271

.endblock

.block

copy: 1 id: 73778-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4127
ABS: An efficient methodology has been developed to determine the
protection afforded by West German villages against the initial
radiation from tactical nuclear weapons. Basement, first and second
story and outdoor detectors are treated. Included in the methodology
are mutual shielding and edge-of-town effects. The methodology was
applied to two model villages. Protection factors and dose

distributions throughout the villages were obtained for burst-to-center of town slant ranges from 200 to 2000 meters and for angles of elevation from 0 to 90 degrees. Although the methodology is applicable to all modes of significant radiation, only neutrons and air secondary gamma rays were directly treated in the methodology demonstration. Fission product and building gamma rays will be included in a second phase effort involving sensitivity studies.

ABS: The results show that the villages afford significant shielding against initial radiation; even for outdoor locations. The edge-of-town effect is seen to be important, particularly if minimum protection is the limiting criterion in targeting. The heavy roofs typically found in West German villages are seen to be a significant factor. The results are not highly sensitive to choice of weapon spectra. It is demonstrated that the methodology, based upon a de-coupling of the air and village transport problems, is an extremely efficient calculational tool. Sensitivity studies, now being performed will extend the results to a wide range of West German villages.

ADNO: C012420
AUTH: COHEN M.O.
CLSS: U (DECLASSD)
CCDE: ATR-3 (RAD TRANSPORT) RRA ; SAM-CE (RAD TRANSPORT) MAGI
CONN: DNA 001 75 C 0064
CORP: MATHEMATICAL APPLICATIONS GROUP, INC. (ELMSFORD, NY)
DATE: 7508
DESC: Civil Defense shelters L1
DESC: Nuclear Weapon Effects structures aboveground cities L1 PROMPT
RADIATION ON SMALL VILLAGES
DESC: Nuclear Warfare Theater collateral damage bonus damage L1
EFFT: NEUTRON ; GAMMA
REPN: DNA 4127F ; MAGI MR 7045
SUJO: 3-252-000 ; 3-412-500 ; 3-474-000
TEMP: B4486 ; B4840 (MF)
TITL: PROTECTION AFFORDED BY WEST GERMAN VILLAGES AGAINST INITIAL
RADIATION FROM TACTICAL NUCLEAR WEAPONS; METHODOLOGY AND SAMPLE
RESULTS (U), 84 P., (U)
TNFF: 4850
TREE: 411 ; 412

.block

DNA 4127

.endblock

.block

copy: 1 id: 77487-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4177F

ABS: Observational differences in the dimensional, blast and thermal properties of low yield nuclear air bursts are discussed. The RHGEN fireball modeling code, which includes the all important opacity effects of debris-air mixing, is used to model a matrix of yields and weapons masses. The dimensional behavior of the models agrees

well with photographic data. Hydrodynamic yields based on the models agree well with radio-chemical values for high "mass effect" explosions where previous hydrodynamic yields are erroneous. Blast properties such as static and dynamic pressures, impulses and durations are compared in detail with EM-1 scaling laws with favorable results. The blast properties are found to scale with the mass-to-yield ratio of the explosion.

ABS: A systematic variation in properties is found to extend from the light extreme to the heavy extreme corresponding to the conventional TNT explosion. The EM-1 scaling laws provide sufficient accuracy except at short ranges and for very specialized applications. An attempt to treat the thermal radiation properties of the models in a similar systematic and comprehensive fashion met with a lesser degree of success. While the trends in times of maxima and minima appear to be substantiated by the models, additional effort is required before quantitative thermal scaling laws can be derived.

ADNO: C013262
AUTH: HILLEDAHL R.W. ; LANDSHOFF R.K. ; SIMPSON E.E.
CLSS: SRD
CONN: DNA 001 75 C 0289
CORP: SCIENCE APPLICATIONS, INC. (PALO ALTO, CA)
DATE: 7510
DESC: Nuclear Weapon Environment Airblast L1
DESC: Nuclear Weapon Phenomenology Fireball Dimensions Rise Rates L1
DESC: Nuclear Weapon Environment Thermal Output rate L5 P 73, 20
DESC: LOW-YIELD ; THEORY EXPERIMENTAL TABULAR
REPN: DNA 4177F ; SAI 72 224 PA
SHOT: DOG (T-S) ; CHARLIE (B J) ; ABLE (T-S) ; WASP ; JOHNNY BOY
TSHO: LOW-ALT
SUJO: 1-240-000 ; 2-110-000 ; 2-610-000
TEMP: B4635
TITL: SCALING LAWS FOR TACTICAL NUCLEAR WEAPONS (U), 86 P., (SRD)
TNFF: 4830

.block

DNA 4177F

.endblock

.block

copy: 1 id: 77531-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4217F
ADNO: C012353
AUTH: SHNIDER R.W. ; SHAPIRO E.S.
CLSS: C
CONN: DNA 001 75 C 0261
CORP: URS RESEARCH CO. (SAN MATEO, CA)
DATE: 7512
DESC: Nuclear Weapon Environment Thermal Output source strength total
intensity L1
DESC: THEORY TABULAR
DESC: Nuclear Weapon Effects on animals thermal burns heating L1
REPN: DNA 4217F

SUJO: 1-210-000 ; 3-313-100
TEMP: B4395 ; B4838 (MF)
TITL: DEVELOPMENT OF PREDICTION TECHNIQUES FOR EFFECTS ON PERSONNEL
EXPOSED TO THERMAL RADIATION (U), 96 P., (C)

.block

DNA 4217F

.endblock

.block

copy: 1 id: 77577-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: DNA 4340F
ADNO: C014564
AUTH: SCOTT W.H. JR. ; FAVERTY R.L. ; DIETZ R.E.
CLSS: U (DECLASSIFIED)
CCDE: MORSE
CONN: DNA 001 75 C 0065
CORP: SCIENCE APPLICATIONS, INC. (LA JOLLA, CA)
DATE: 7510
DESC: Cross Sections neutron L1 BUILDINGS
REPN: DNA 4340F ; SAI 75 652 LJ
SUJO: 9-820-000
TEMP: B5111
TITL: INITIAL RADIATION PROTECTION IN WEST GERMAN VILLAGES (U), 114 P.,
(C)

TREE: 412

.block

DNA 4340F

.endblock

.block

copy: 1 id: 77700-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-16-174
ABS: A parametric study of the presence of an infinitely long circular
cylinder within two parallel plates of finite width is conducted.
The numerical method is used for a special case where the axis of
the cylinder is constrained on the center plane between the plates
in terms of the impedance factor of the system and charge
distribution on the cylinder.

AUTH: Cho S.K. ; Chu C.
CLSS: U
CORP: Univ. of Michigan Radiation Lab. (Ann Arbor, MI)
DATE: 7301
DESC: THEORY
DESC: Simulation Facilities Techniques EMP L1
DESC: Nuclear Weapon Effects missile systems L1
EFFT: EMP
EMPF: 726
SUJO: 3-112-000 ; 4-271-000

SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 16, Notes
167-174

TITL: Parametric Study of a Circular Cylinder Within Two Parallel Plates
of Finite Width (U), 40 P., (U)

.block

EMP 1-16-174

.endblock

.block

copy: 1 id: 52795-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-17-178

ABS: The transient waveforms radiated by step voltage excited linear
antennas, loaded non-uniformly and continuously with resistance,
are investigated by numerical means. The input time varying
excitations considered are step voltage, Gaussian pulse and gamma
pulse types. Current distributions on the harmonically excited
antenna are obtained as functions of frequency for different values
of the loading. The transfer functions of the antenna and the
spectral densities of the radiated waveforms are obtained as
functions of frequency and the loading for two values of the antenna
thickness and for different directions in space. Finally the time
dependent radiated waveforms produced by the antenna are obtained by
using fast Fourier inversion technique.

ABS: The effects of the various antenna parameters on the radiated
waveforms are also investigated. Some of the results are compared
with available approximate analytical results.

AUTH: Liu Y.P.

CLSS: U

CORP: Univ. of Michigan Radiation Lab. (Ann Arbor, MI)

DATE: 7302

DESC: THEORY

DESC: Simulation Facilities Techniques EMP L1

EMPF: 722

SUJO: 4-271-000

SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 17, Notes
175-179

TITL: On the Transient Waveforms Radiated by a Resistively Loaded Linear
Antenna (U), 167 P., (U)

.block

EMP 1-17-178

.endblock

.block

copy: 1 id: 52800-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-19-186

ABS: The admittances and fields of a planar array with the sources
excited in a constant-amplitude, progressive-phase manner are
derived and evaluated. The array consists of infinitely long wires,

with each wire containing uniformly-spaced voltage sources. It is demonstrated that the propagating wave contains many lobes, each being a TEM plane wave propagating in a direction dependent on the frequency. The radiation field has non-vanishing low frequency components.

AUTH: Liu T.K.
CLSS: U
CORP: Dikewood Corp. (Los Angeles, CA.)
DATE: 7310
DESC: Simulation Facilities Techniques EMP L1
DESC: THEORY
EMPF: 722
SUJO: 4-271-000
SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 19, Notes
186-193
TITL: Admittances and Fields of a Planar Array with Sources Excited in a
Plane Wave Sequence (U), 54 P., (U)

.block

EMP 1-19-186

.endblock

.block

copy: 1 id: 52810-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-19-193
ABS: Analytical and numerical results are obtained for the equivalent
area, radiation resistance, polarizabilities, and field enhancement
factors of an ellipsoid or a half ellipsoid symmetrically resting on
an infinite ground plane. It is shown that simple relationship
exists among these quantities.

AUTH: Lee K.S.H.
CLSS: U
CORP: Dikewood Corp. (Los Angeles, CA)
DATE: 7402
DESC: Nuclear Weapon Effects flight systems airplanes electronics L1
DESC: test instruments electronic vulnerability EMP L1
DESC: THEORY
EFFT: EMP
EMPF: 811 ; 321
SUJO: 3-111-300 ; 4-371-000
SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 19, Notes
186-193

TITL: Electrically-Small Ellipsoidal Antennas (U), 50 P., (U)

.block

EMP 1-19-193

.endblock

.block

copy: 1 id: 52814-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-20-196

ABS: This note is specifically concerned with the electromagnetic properties of the evacuated steel tank used to support the satellite environment in SGEMP simulations. Since the tank is a good conductor it does not allow the radio frequency energy to escape easily. Thus oscillations or ringing modes are set up at discrete frequencies which are executed either by the satellite's EM radiation or by photoelectric currents in tank volume. Methods are examined for keeping the tank model oscillations small so they will not seriously degrade the quality of the simulation. (This note was originally prepared as Tank Physics Memo 7, October 1972).

AUTH: Messier M.A. ; Longmire C.L.

CLSS: U

CORP: Mission Research Corp. (Santa Barbara, CA)

DATE: 7405

DESC: Simulation Facilities Techniques EMP L1 SGEMP

DESC: THEORY

EFFT: IEMP

EMPF: 726

SUJO: 4-271-000

SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 20, Notes 194-202

TITL: Damping of Tank Oscillations with Conducting Dielectric Shells (U), 50 P., (U)

.block

EMP 1-20-196

.endblock

.block

copy: 1 id: 53166-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-21-203

ABS: The problem of pulsed antennas has two complementary parts: 1) analysis of the radiation field when the driving voltage is given; 2) synthesis of the driven voltage when the radiation field is given. In this paper a number of heuristic procedures are presented, relating to the computation of transient radiation from elementary sources, coaxial apertures, infinitely long cylindrical antennas, finite cylindrical antennas, and loop antennas. Comparison with available rigorous solutions and experiments is also provided.

AUTH: Franceschetti G. ; Papas C.H.

CLSS: U

CORP: California Institute of Technology (Pasadena, CA.)

DATE: 7312

DESC: THEORY

DESC: Simulation Facilities Techniques EMP L1

EMPF: 722

SUJO: 4-271-000

SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 21, Notes 194-203

TITL: Pulsed Antennas (U), 42 P., (U)

.block

EMP 1-21-203

.endblock

.block

copy: 1 id: 54174-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 1-22-209

ABS: A theoretical model is defined for an electromagnetic pulse (EMP) simulator for testing EMP effects on high altitude satellites. The simulator is composed of three flat-plate transmission line sections. The first and third sections are tapered to accommodate, respectively, a generator and a terminating resistor. This problem is analyzed in the frequency domain over those frequency components which are known to contribute most significantly to a typical EMP waveform. The analysis uses a numerical technique to solve the basic problem of an unknown current distribution on a curved, tapered strip, excited by a known electric field. The unknown current is solved by the method of moments, using triangular basis functions. To check the computer program, input impedances are computed for the triangular dipole. It is shown that these solutions compare quite favorably with experimental results.

ABS: Variations in the solutions are also demonstrated for these same cases when edge singularities are not taken into account in the analysis. For the transmission line simulator, computed input impedance, VSWR, power dissipated in the terminating resistor, and the power lost to radiation are presented as a function of frequency. The computed current distributions are used to calculate the electric fields between and immediately beyond the parallel plates. Although a considerable portion of power is converted to radiation at the higher frequencies, it is shown that at least within the working volume the electric field maintains a reasonably constant level.

AUTH: Soo Hoo K.M.

CLSS: U

CORP: Aerospace CORP.

DATE: 7401

DESC: Simulation Facilities Techniques EMP L1

DESC: THEORY

EMPF: 721

SUJO: 4-271-000

SYMJ: Electromagnetic Pulse Sensor and Simulation Notes; Vol. 22, Notes 208 through 214 (U)

TITL: Numerical Analysis of a Transmission Line EMP Simulator (U), 30 P., (U)

.block

EMP 1-22-209

.endblock

.block

copy: 1 id: 56051-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 2-11-203

ABS: The current induced in an impedance connecting the two sections of a slotted hollow sphere when an electron is moving in the vicinity is calculated under the quasistatic approximation.

AUTH: Latham R.W.

CLSS: U

CORP: Tetra Tech, Inc.

DATE: 7409

DESC: THEORY

DESC: test instruments nuclear radiation beta electron beams L1

EMPF: 865

SUJO: 4-344-000

SYMJ: Electromagnetic Pulse Theoretical Notes; Vol. 11 (U)

TITL: Currents Induced on an Impedance within a Slotted Sphere (U), 37 P., (U)

TREE: 654

.block

EMP 2-11-203

.endblock

.block

copy: 1 id: 53598-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-11-142

ABS: A thin, perfectly conducting, spherical shell having a circular aperture is illuminated by a plane (c.w.) electromagnetic wave at symmetrical incidence. Using a formulation of the problem which is, in principle, exact, a computer program previously developed for the determination of the scattered fields is modified to permit the calculation of the fields within the cavity. Data are presented for a variety of cases and compared with the results of approximate methods.

AUTH: Senior T.B.A. ; Desjardins G.A.

CLSS: U

CORP: University of Michigan Radiation La.. (Ann Arbor, MI)

DATE: 7308

DESC: THEORY

DESC: RF EMP shielding protection L1

EMPF: 303

SUJO: 9-810-000

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 11, Notes 136 through 143 (U)

TITL: Field Penetration into a Spherical Cavity (U), 49 P., (U)

.block

EMP 3-11-142

.endblock

.block

copy: 1 id: 52863-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-12-145

ABS: The solution of the three-dimensional scattering of plane electromagnetic waves obliquely incident on an infinitely long perfectly conducting cylinder can be deduced from two-dimensional scattering solutions when the cylinder is in free space or over a perfectly conducting ground. This is not true when the ground is finitely conducting. The problem of the reflection of cylindrical waves at the boundary of a finitely conducting ground is itself a nontrivial problem. In order to develop solutions for these problems we consider first the simpler two-dimensional problems of electric and magnetic line sources over a finitely conducting ground. We calculate the Green's functions and obtain the reflected waves in the form of a reflection operator acting on the image source solution.

ABS: For large values of the product of wave number and distance from the image source the reflection operations become the well known Fresnel reflection coefficients. A succinct treatment is given of the problems when the line sources are at infinity and the radiation impinges on a perfectly conducting cylinder lying parallel to the finitely conducting ground. The three dimensional problems are then considered and the boundary conditions at the surface of the ground are satisfied by introducing transverse waves of both types at the interface, even though the incident waves are either transverse electric or transverse magnetic.

AUTH: Flammer C.

CLSS: U

CORP: Stanford Research Institute (Menlo Park, CA)

DATE: 7308

DESC: Electromagnetic Theory Applications L1

DESC: THEORY

EMPF: 304

SUJO: 9-300-000

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 12, Notes 144 through 151 (U)

TITL: On the Scattering of Electromagnetic Waves by a Perfectly Conducting Cylinder Over a Finitely Conducting Ground (U), 40 P., (U)

.block

EMP 3-12-145

.endblock

.block

copy: 1 id: 52867-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-14-170

ABS: The problem of EMP excitation of cavities through small apertures is discussed. Of particular importance are the study of radiation damping and the resonant frequency shift of an open cavity. Some fallacies in the literature are corrected.

AUTH: Chen K.C. ; Baum C.E.

CLSS: U

CORP: Air Force Weapons Lab.

DATE: 7401

DESC: RF EMP shielding protection L1
DESC: THEORY
EMPF: 303
SUJO: 9-810-000
SYMJ: Electromagnetic Pulse Interaction Notes, Vol. 14 (U)
TITL: On EMP Excitations of Cavities with Small Openings (U), 56 P., (U)

.block

EMP 3-14-170

.endblock

.block

copy: 1 id: 52886-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-18-201

ABS: The piecewise-sinusoidal reaction technique is applied to low frequency radiation and scattering from noncircular cylinders with perfect or imperfect conductivity. This report presents the theory, computer programs and numerical results for these two-dimensional problems with the TE polarization.

AUTH: Richmond J.H.

CLSS: U

CCDE: ZZ (EM SCATTERING) OHIO STATE U

CORP: Ohio State University

DATE: 7304

DESC: Nuclear Weapon Effects structures aboveground models cylinders cones rings L1

DESC: THEORY CODE

EFFT: EMP

EMPF: 304 ; 302

SUJO: 3-259-400

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 18, Notes 193 through 201 (U)

TITL: Integral-Equation Solution for TE Radiation and Scattering from Conducting Cylinders (U), 81 P., (U)

.block

EMP 3-18-201

.endblock

.block

copy: 1 id: 54106-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-19-202

ABS: Piecewise-sinusoidal expansion functions and Galerkin's method are employed to formulate a solution for an arbitrary thin-wire configuration in a homogeneous conducting medium. The analysis is performed in the real or complex frequency domain. In antenna problems, the solution determines the current distribution, impedance, radiation efficiency, gain and far-field patterns. In scattering problems, the solution determines the absorption cross section, scattering cross section and the polarization scattering

matrix. This report presents the electromagnetic theory for thin wires and develops the forward-scattering theorem for an arbitrary target in a homogeneous conducting medium.

AUTH: Richmond J.H.
CLSS: U
CORP: Ohio State University
DATE: 7405
DESC: THEORY
EFFT: EMP
EMPF: 303 ; 321
SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 19, Notes 202 through 209 (U)
TTTL: Radiation and Scattering by Thin-Wire Structures in the Complex Frequency Domain (U), 41 P., (U)

.block

EMP 3-19-202

.endblock

.block

copy: 1 id: 54108-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-19-203

ABS: A computer program is presented for thin-wire antennas and scatterers in a homogenous conducting medium. The analysis is performed in the real or complex frequency domain. The program handles insulated and bare wires with finite conductivity and lumped loads. The output data includes the current distribution, impedance, radiation efficiency, gain, absorption cross section, scattering cross section, echo area and the polarizaiton scattering matrix. The program uises sinusoidal bases and Galerkin's method.

AUTH: Richmond J.H.
CLSS: U
CCDE: ZZ (ELECTROMAGNETIC SCATTERING) OHIO STATE
CORP: Ohio State University
DATE: 7406
DESC: CODE
DESC: Electromagnetic Theory Applications L1
EMPF: 304 ; 321
SUJO: 9-300-000
SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 19, Notes 202 through 209 (U)
TTTL: Computer Program for Thin-Wire Structures in a Homogeneous Conducting Medium (U), 52 P., (U)

.block

EMP 3-19-203

.endblock

.block

copy: 1 id: 54109-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-19-204

ABS: A computer program is presented for a thin-wire antenna over a perfect ground plane. The analysis is performed in the frequency domain, and the exterior medium is free space. The antenna may have finite conductivity and lumped loads. The output data includes the current distribution, impedance, radiation efficiency and gain. The program uses sinusoidal bases and Galerkin's method.

AUTH: Richmond J.H.

CLSS: U

CCDE: ZZ (ANTENNA COUPLING) OSU

CORP: Ohio State University

DATE: 7410

DESC: THEORY CODE

EFFT: EMP

EMPF: 321

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 19, Notes 202 through 209 (U)

TITL: Computer Program for Thin-Wire Antenna Over a Perfectly Conducting Ground Plane (U), 44 P., (U)

.block

EMP 3-19-204

.endblock

.block

copy: 1 id: 54110-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-19-205

ABS: It has been shown by this investigator and numerous others that exterior boundary value problems involving localized inhomogeneous media are most conveniently solved using finite difference or finite element technique together with integral equations or harmonic expansions, which satisfy the radiation conditions. The methods result in large matrices which are partly full and partly sparse, and methods to solve them, such as iteration or banded matrix methods are not very satisfactory. The uni-moment method alleviates the difficulties by decoupling exterior problems from the interior boundary value problems. This is done by solving the interior problem many times so that N linearly independent solutions are generated.

ABS: The continuity conditions are then enforced by a linear combination of the N independent solutions, which may be done by solving much smaller matrices. Methods of generating solutions of the interior problems are discussed.

AUTH: Mei K.K.

CLSS: U

CORP: University of California, Berkeley

DATE: 7309

DESC: THEORY

EFFT: EMP

EMPF: 321 ; 304

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 19, Notes 202 through 209 (U)

TITL: Uni-Moment Method of Solving Antenna and Scattering Problems (U), 26
P., (U)

.block

EMP 3-19-205

.endblock

.block

copy: 1 id: 54111-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-19-207

ABS: Program WAMP is a Wire Antenna Modeling Program written in FORTRAN IV and applicable to arbitrary antenna and support structures. WAMP models an antenna as a series of interconnected straight wire segments, and solves the electromagnetic boundary value problem by numerically evaluating an electric field integral equation. Antennas may be analyzed in free space, over a perfect ground, a radial ground screen, or in the presence of any homogeneous media. Antenna input impedance, current distributions, near-electric fields and far-field radiation patterns are also calculated. The users manual covers both the theory and numerical techniques employed in WAMP. The program's input variables are defined, and illustrative examples are used to demonstrate the program's capabilities.

AUTH: Deadrick F.J. ; Miller E.K.

CLSS: U

CCDE: WAMP (ANTENNA COUPLING) LLL

CORP: Lawrence Livermore Lab. (Livermore, CA)

DATE: 7312

DESC: THEORY CODE

DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio
microwave systems antennas L1

EFFT: EMP

EMPF: 321

SUJO: 3-132-210

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 19, Notes 202 through
209 (U)

TITL: WAMP: A Users Manual for the Wire Antenna Modeling Program (U), 107
P., (U)

.block

EMP 3-19-207

.endblock

.block

copy: 1 id: 54113-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-21-220

ABS: For a time-harmonic electromagnetic field incident on a thin, perfectly conducting spherical shell with a circular aperture, methods for the exact determination of the interior fields are discussed. The advantages of the direct E field integral equation are pointed out. The unknowns are then the tangential components of

the currents induced in the shell, and two alternative versions of the resulting coupled integral equations are developed. The one found most convenient is particularized to the case of a plane wave incident symmetrically upon the aperture.

AUTH: Senior T.B.A.
CLSS: U
CORP: University of Michigan Radiation Lab. (Ann Arbor, MI)
DATE: 7501
DESC: RF EMP shielding protection L1
DESC: THEORY
EMPF: 303
SUJO: 9-810-000
SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 21, Notes 218 through 224 (U)
TITL: Spherical Cavity Problem (U), 23 P., (U)

.block

EMP 3-21-220

.endblock

.block

copy: 1 id: 54749-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-21-221

ABS: To test the efficacy of a direct integral equation approach to the study of cavity-aperture interactions, the problem of an E-polarized plane electromagnetic wave incident on a thin, perfectly conducting cylindrical shell with a slit aperture is considered. A computer program is constructed for the solution of the appropriate E field integral equation. Data are presented showing the behavior of the field inside the cavity and in the aperture for a variety of aperture and cavity dimensions, and some information is obtained about the SEM singularities and their dependence on aperture size.

AUTH: Senior T.B.A.
CLSS: U
CORP: University of Michigan Radiation Lab. (Ann Arbor, MI)
DATE: 7501
DESC: RF EMP shielding protection L1
DESC: THEORY TABULAR
EMPF: 303
SUJO: 9-810-000
SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 21, Notes 218 through 224 (U)

TITL: Field Penetration into a Cylindrical Cavity (U), 41 P., (U)

.block

EMP 3-21-221

.endblock

.block

copy: 1 id: 54750-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-24-235

ABS: Equations by which one can determine the natural frequencies of prolate and oblate spheroids are derived using the boundary-value-problem approach. Both transverse magnetic and transverse electric excitations are considered. Numerical results are given for the natural frequencies of transverse-magnetic-excited prolate spheroids with various eccentricities, demonstrating natural mode dependence on eccentricity. Numerical difficulties, however, precluded obtaining natural frequencies for oblate spheroids, transverse-electric-excited prolate spheroids, and transverse-magnetic-excited prolate spheroids with sheaths.

AUTH: Lytle R.J. ; Deadrick F.J.

CLSS: U

CORP: Lawrence Radiation Lab. (Livermore, CA)

DATE: 7504

DESC: THEORY

DESC: Nuclear Weapon Effects structures aboveground models L1

EFFT: EMP

EMPF: 302

SUJO: 3-259-000

SYMJ: Electromagnetic Pulse Interaction Notes; Vol. 24, Notes 234 through 238 (U)

TITL: Determining the Natural Frequencies of Spheroids via the Boundary-Value Problem Formulation (U), 20 P., (U)

.block

EMP 3-24-235

.endblock

.block

copy: 1 id: 55988-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 3-27-261

ABS: Numerical techniques for solutions to the problems of electromagnetic radiation and scattering are considered for a finite, hollow, circular cylinder of radius a . The singular-integral equations of electromagnetic scattering theory are derived along with their extensions to thin surfaces and surfaces with edges. In addition, constraints are presented which are necessary for a unique solution to the scattering problems of thin structures. The equations for a finite hollow cylinder are obtained by expanding the field quantities in Fourier series about the cylinder axis giving rise to a separate set of singular integral equations for each harmonic. The method of moments is presented as the basic technique of digitizing the integral equations for numerical solution.

ABS: It is found that the variational interpretation of the method of moments can be used as a guide for choosing the basis and testing functions. Of particular interest as basis functions are the spline functions of finite support. The spline function properties of smoothness and best fit are also presented. It is shown that Hallen's and Pocklington's formulations for the thin wire problem are equivalent numerically for appropriate testing functions. It is also shown that the Pocklington form is more desirable when smooth

basis functions are used in conjunction with pulse or delta testing functions. In this context, the second-order sinusoidal spline is found to be an excellent current representation for both the scattering and pulse-feed problems.

ABS: Slope discontinuities are easily included to approximate a delta-feed problem. Approximate operators are also considered with emphasis on the equivalence of the finite difference approximation and piecewise sinusoidal basis functions. The problems of coupling in the higher harmonics are investigated for the first-harmonic problem. It is shown that minimum coupling of the equations is desirable in addition to the dominance of each equation over the entire structure by its respective current component. These features are obtained using a new set of equations obtained from the combination of the equations for the tangential electric field and the normal magnetic field. These equations are related to the normal derivative of the tangential magnetic field equations which are well-behaved for thick structures.

ABS: The solutions of these equations are in excellent agreement with the results of other workers. Various operator approximations are also considered.

AUTH: Davis W.A.

CLSS: U

CORP: University of Illinois (Urbana, IL)

DATE: 7512

DESC: Nuclear Weapon Effects structures aboveground models cylinders cones rings L1

DESC: THEORY

EFFT: EMP

EMPF: 302 ; 304

SUJO: 3-259-400

SYMJ: Electromagnetic Pulse Interaction Notes, Vol. 27 (U)

TITL: Numerical Solutions to the Problems of Electromagnetic Radiation and Scattering by a Finite Hollow Cylinder (U), 101 P., (U)

.block

EMP 3-27-261

.endblock

.block

copy: 1 id: 56545-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: EMP 4-2-17

ABS: This note considers two design approaches for signal transmission lines used to transport signals from sensors in an intense transient nuclear radiation environment to locations outside that environment. One approach is a metal-dielectric transmission line with grids for signal conductors, an outer electromagnetic shield, small and matched atomic numbers of the materials, and an outer graded atomic number nuclear radiation shield. The second approach is a metal-vacuum transmission line with similar grids and electromagnetic and nuclear radiation shields; it also has additional grids that are biased to collect low energy electrons that would otherwise pass between the signal grids. The various

features of both types of cables are discussed and some tradeoffs are indicated where conflicts exist.

AUTH: Baum C.E.
CLSS: U
CORP: Air Force Weapons Lab.
DATE: 7310
DESC: THEORY TABULAR
DESC: test instruments electronic vulnerability EMP L1
EMPF: 872
SUJO: 4-371-000
SYMJ: Electromagnetic Pulse Measurement Notes; Vol. 2, Notes 17-28 (U)
TTTL: Some Design Considerations for Signal Transmission Lines for Use with Sensors in a Nuclear Radiation Environment (U), 26 P., (U)

.block

EMP 4-2-17

.endblock

.block

copy: 1 id: 52907-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: HP26041
AUTH: BURSON Z.G.
CLSS: U
CORP: EG+G, INC. (LAS VEGAS, NV.)
DATE: 7400
DESC: Nuclear Weapon Environment Fallout gamma intensities spectra L5
DESC: Nuclear Weapon Effects land transport unhardened vehicles L1
DESC: Simulation Facilities Techniques nuclear radiation fallout simulation L5
DESC: EXPERIMENTAL
EFFT: X-RAY ; GAMMA
SUJO: 2-223-200 ; 3-152-000 ; 4-242-000
SYMJ: HEALTH PHYSICS, VOL. 26 (JAN.), PP. 41-44
TTTL: ENVIRONMENTAL AND FALLOUT GAMMA RADIATION PROTECTION FACTORS PROVIDED BY CIVILIAN VEHICLES (U), 4 P., (U)

.block

HP26041

.endblock

.block

copy: 1 id: 82593-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73
CLSS: U
CORP: INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (NEW YORK, NY)
DATE: 7312
TTTL: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, VOL. NS-20, NO. 6; ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS, JULY 23-26, 1973 (U), 400 P., (U)

.block

IEEE73

.endblock

.block

copy: 1 id: 82743-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-014

AUTH: LOPEZ O. ; RICH W.F.

CLSS: U

CCDE: TRIFIC ; MYOPIC ; EGRESS ; RIPIC

CONN: DAHC 60 68 C 0020

CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO)

DATE: 7300

DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1 CYLINDER

DESC: Cross Sections x-ray L1

DESC: THEORY

EFFT: IEMP

EMPF: 391

TSHO: UG-CONTAINED

SUJO: 3-259-400 ; 9-840-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: DYNAMIC INTERNAL ELECTROMAGNETIC PULSE CALCULATIONS IN THREE SPATIAL
DIMENSIONS (U), 6 P., (U)

.block

IEEE73-014

.endblock

.block

copy: 1 id: 82744-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-020

AUTH: DEPLOMB E.P.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 DIODE

DESC: THEORY EXPERIMENTAL

EFFT: TREE

EMPF: 391

SUJO: 3-229-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: ANALYTICAL SOLUTIONS OF PRESSURE EFFECTS UPON CURRENT TRANSMISSION
ACROSS A DIODE (U), 6 P., (U)

TREE: 305

.block

IEEE73-020

.endblock

.block

copy: 1 id: 82745-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-026

AUTH: STAHL R.H. ; DEPLOMB E.P. ; WENAAS E.P. ; MALLON C.E.

CLSS: U

CCDE: TEDIEM-RZ

CONN: DNA 001 72 C 0090

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7300

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

DESC: Cross Sections gamma L1

EMPF: 391

SUJO: 9-830-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.

6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: PRESSURE EFFECT ON SPACE-CHARGE-LIMITED CURRENT TRANSMITTED ACROSS A
CYLINDRICAL CAVITY (U), 5 P., (U)

TREE: 960

.block

IEEE73-026

.endblock

.block

copy: 1 id: 82746-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-031

AUTH: EDELMAN D. ; CHADSEY W.L.

CLSS: U

CONN: DAAG 39 73 C 0023

CORP: GENERAL ELECTRIC CO., REENTRY AND ENVIRONMENTAL SYSTEMS DIV.
(PHILADELPHIA, PA) ; SCIENCE APPLICATIONS, INC. (ARLINGTON, VA)

DATE: 7300

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electrical mechanical cables wires L1

EFFT: IEMP

EMPF: 392

SUJO: 3-231-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.

6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: IEMP CABLE COUPLING PHENOMENOLOGY IN SMALL ENCLOSURES (U), 9 P., (U)

.block

IEEE73-031

.endblock

.block

copy: 1 id: 82747-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-040
AUTH: VAULT W.L.
CLSS: U
CORP: HARRY DIAMOND LABS. (WASH., DC)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
SYNERGISTIC EFFECT
DESC: SIMULATION (FLASH X-RAY POWER PULSE) ; EXPERIMENTAL
EFFT: IEMP ; TREE
EMPF: 393
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: DAMAGE SUSCEPTIBILITY OF INTEGRATED CIRCUITS TO A SIMULATED IEMP
TRANSIENT (U), 8 P., (U)
TREE: 320

.block

IEEE73-040

.endblock

.block

copy: 1 id: 82748-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-048
AUTH: BRUMLEY F.B. ; EVANS D.C. ; MANGAN D.L.
CLSS: U
CCDE: NUCYL
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 POLYETHYLENE
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
EFFT: IEMP
EMPF: 391
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: IEMP STUDIES OF A DIELECTRIC-FILLED CAVITY--A COMPARISON OF
EXPERIMENT AND THEORY (U), 10 P., (U)

.block

IEEE73-048

.endblock

.block

copy: 1 id: 82749-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-058
AUTH: BERNSTEIN M.J.

CLSS: U
CORP: AEROSPACE CORP. (EL SEGUNDO, CA)
DATE: 7300
DESC: SIMULATION (PLASMA FOCUS DEVICE) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: TREE
EMPF: 392
SUJO: 3-231-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION INDUCED CURRENTS IN SUBMINIATURE COAXIAL CABLES (U), 6 P.,
(U)

TREE: 390

.block

IEEE73-058

.endblock

.block

copy: 1 id: 82750-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-064

AUTH: MARX K.D.

CLSS: U

CONN: AT (29 1) 789

CORP: SANDIA LABS. (LIVERMORE, CA)

DATE: 7300

DESC: THEORY

DESC: Nuclear Weapon Effects electrical mechanical cables wires L1

EFFT: TREE

EMPF: 392

SUJO: 3-231-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: MULTIPLE DIELECTRIC RELAXATION TIMES IN AN IRRADIATED TRANSMISSION
LINE (U), 8P., (U)

TREE: 390

.block

IEEE73-064

.endblock

.block

copy: 1 id: 82751-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-072

AUTH: LUBELL J.I. ; MELZER S.M.

CLSS: U

CCDE: SCEPTRE

CORP: TRW SYSTEMS (REDONDO BEACH, CA)

DATE: 7300

DESC: Nuclear Weapon Effects electrical mechanical cables wires L1

DESC: THEORY
EFFT: TREE
EMPF: 318 ; 319
SUJO: 3-231-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TRANSMISSION LINE MODELS FOR USE WITH CIRCUIT/SYSTEM ANALYSIS
PROGRAM (U), 10 P., (U)
TREE: 250 ; 390

.block

IEEE73-072

.endblock

.block

copy: 1 id: 82752-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-082
AUTH: GARTH J.C. ; O'BRIEN J.V.
CLSS: U
CCDE: BOLT ; POEM ; SANDYL ; ETRAN
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA) ; ARCON CORP.
(WAKEFIELD, MA)

DATE: 7300

DESC: Nuclear Weapon Effects materials metals alloys L1 AL AU AL/AU

DESC: Radiation Transport electron L1

DESC: THEORY

EFFT: TREE

EMPF: 391

SUJO: 3-243-000 ; 9-680-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: NUMERICAL SOLUTION OF THE SPENCER-LEWIS EQUATION FOR KILOVOLT
ELECTRON TRANSPORT IN PLANE SLABS (U), 9 P., (U)

TREE: 990

.block

IEEE73-082

.endblock

.block

copy: 1 id: 82753-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-091
AUTH: DELLIN T.A. ; MACCALLUM C.J.
CLSS: U
CCDE: SANDYL ; POEM
CORP: SANDIA LABS. (LIVERMORE, CA) ; SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: SIMULATION (CO 60 CS 137) ; THEORY EXPERIMENTAL
DESC: Radiation Transport electron L1
DESC: Nuclear Weapon Effects materials carbon L1

DESC: Nuclear Weapon Effects materials metals alloys L1 AU CU AL TA P6 MO
W
EFFT: TREE
EMPF: 391
SUJO: 3-243-000 ; 3-248-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: ANALYTICAL PREDICTION OF PHOTO-COMPTON EMISSION CURRENTS (U), 6 P.,
(U)
TREE: 960

.block

IEEE73-091

.endblock

.block

copy: 1 id: 82754-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-097
AUTH: KOOI C.F. ; KUSNEZOV N.
CLSS: U
CCDE: CAPP
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)
DATE: 7300
DESC: Radiation Transport x-ray L1
DESC: Nuclear Weapon Effects materials metals alloys L1 AL BE P6 SN CU
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 POLYETHYLENE TEFLON

EFFT: TREE
EMPF: 391
SUJO: 3-220-200 ; 3-243-000 ; 9-640-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: X-RAY PRODUCED CHARGE DISTRIBUTIONS AT INTERFACES BETWEEN MATERIALS
OF DIFFERENT ATOMIC NUMBER (U), 8 P., (U)
TREE: 980

.block

IEEE73-097

.endblock

.block

copy: 1 id: 82755-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-105
AUTH: BRADFORD J.N.
CLSS: U
CCDE: POEM
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA)
DATE: 7300
DESC: Radiation Transport x-ray L1

DESC: Nuclear Weapon Effects materials metals alloys L1 AL CU MO TA
DESC: SIMULATION (X-RAY MACHINE) ; EXPERIMENTAL
EFFT: X-RAY
EMPF: 391
SUJO: 3-243-000 ; 9-640-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: X-RAY INDUCED ELECTRON EMISSION II (U), 6 P., (U)
TREE: 980

.block

IEEE73-105

.endblock

.block

copy: 1 id: 82756-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-111
AUTH: BERNSTEIN M.J. ; PASCHEN K.W.
CLSS: U
CORP: AEROSPACE CORP. (EL SEGUNDO, CA)
DATE: 7300
DESC: Radiation Transport x-ray L1
DESC: Nuclear Weapon Effects materials carbon L1
DESC: SIMULATION (X-RAY MACHINE) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects materials metals alloys L1 AL TA CU AG MG TI
FE AU P6
EFFT: X-RAY
EMPF: 391
SUJO: 3-243-000 ; 3-248-000 ; 9-640-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: FORWARD AND BACKWARD PHOTOEMISSION YIELDS FROM METALS AT VARIOUS
X-RAY ANGLES OF INCIDENCE (U), 6 P., (U)
TREE: 980

.block

IEEE73-111

.endblock

.block

copy: 1 id: 82757-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-117
AUTH: KING J.C. ; SANDER H.H.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio
microwave systems L1
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

EFFT: TREE
SUJO: 3-132-000 ; 3-212-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: TRANSIENT CHANGE IN Q AND FREQUENCY OF AT-CUT QUARTZ RESONATORS
FOLLOWING EXPOSURE TO PULSE X-RAYS (U), 9 P., (U)

TREE: 367

.block

IEEE73-117

.endblock

.block

copy: 1 id: 82758-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-126

AUTH: LEADON R.E. ; MALLON C.E. ; GREEN B.A.

CLSS: U

CONN: F 29601 72 C 0076

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7300

DESC: SIMULATION (LINAC) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 PAK PVF

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 CAPACITOR

EFFT: TREE

SUJO: 3-220-200 ; 3-229-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: DOSE AND DOSE RATE DEPENDENCE OF INDUCED CONDUCTIVITY IN DIELECTRICS
(U), 3 P., (U)

TREE: 370 ; 385

.block

IEEE73-126

.endblock

.block

copy: 1 id: 82759-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-129

AUTH: BOESCH H.E. ; MCGARRITY J.M.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., DC)

DATE: 7300

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 CAPACITORS

EFFT: TREE

SUJO: 3-229-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.

6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITLE: PRE-IRRADIATION BIASING EFFECTS IN TANTALUM CAPACITORS (U), 8 P., (U)

TREE: 370

.block

IEEE73-129

.endblock

.block

copy: 1 id: 82760-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-137

AUTH: BERG N.J. ; SPEULSTRA J.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., DC)

DATE: 7300

DESC: SIMULATION (FLASH X-RAY CO 60 REACTOR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio

microwave systems L1

EFFT: TREE

SUJO: 3-132-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.

6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITLE: OPERATION OF ACOUSTIC SURFACE WAVE DELAY LINES IN A NUCLEAR

ENVIRONMENT (U), 7P., (U)

TREE: 368

.block

IEEE73-137

.endblock

.block

copy: 1 id: 82761-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-144

AUTH: BORREGO J.M. ; GUTMANN R.J. ; GEIPEL H.J. ; GHANDI S.K.

CLSS: U

CONN: F 19628 72 C 0112

CORP: RENSSELAER POLYTECHNIC INSTITUTE (TROY, NY)

DATE: 7300

DESC: SIMULATION (LINAC) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio

microwave systems L1

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes

silicon-controlled rectifiers L1 TRAPATT IMPATT

EFFT: TREE

SUJO: 3-132-000 ; 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.

6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITLE: OPERATION OF TRAPATT OSCILLATORS UNDER TRANSIENT IONIZING RADIATION

CONDITIONS(U), 5 P., (U)

TREE: 367
.block
IEEE73-144
.endblock
.block
copy: 1 id: 82762-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-149
AUTH: LONG D.M. ; SWANT D.H.
CLSS: U
CONN: F 19628 71 C 0198
CORP: GENERAL ELECTRIC CO., REENTRY AND ENVIRONMENTAL SYSTEMS DIV.
(PHILADELPHIA, PA)
DATE: 7300
DESC: SIMULATION (FLASH X-RAY POWER PULSE) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: EMP ; TREE
EMPF: 341
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: BURNOUT OF JUNCTION FIELD EFFECT TRANSISTORS (U), 9 P., (U)
TREE: 310

.block
IEEE73-149
.endblock
.block
copy: 1 id: 82763-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-158
AUTH: NEAMEN D. ; SHEDD W. ; BUCHANAN B.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 JFET
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: PERMANENT IONIZING RADIATION EFFECTS IN DIELECTRICALLY BOUNDED FIELD
EFFECT TRANSISTORS (U), 8 P., (U)
TREE: 310

.block
IEEE73-158
.endblock

.block

copy: 1 id: 82764-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-166
AUTH: KUHLMANN G.J. ; GRANNEMANN W.W.
CLSS: U
CORP: UNIVERSITY OF NEW MEXICO, BUREAU OF ENGINEERING RESEARCH
(ALBUQUERQUE, NM)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MIS CAPACITOR
DESC: SIMULATION (CO 60 FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: IONIZING RADIATION EFFECTS ON GAASP MIS CAPACITOR STRUCTURES (U), 5
P., (U)
TREE: 320

.block

IEEE73-166

.endblock

.block

copy: 1 id: 82765-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-171
AUTH: GINELL W.S. ; ZULEEG R. ; MCNICHOLS J.L. ; NOTTHOFF J.K. ; LEHOVEC
K.
CLSS: U
CORP: MCDONNELL DOUGLAS ASTRONAUTICS CO. (HUNTINGTON BEACH, CA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 GUNN SCHOTTKY IMPATT LASER DIODE
BIPOLAR TRANSISTORS JFET-S LED-S
DESC: SIMULATION (FLASH X-RAY REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 LED
EFFT: TREE
SUJO: 3-133-000 ; 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: TRANSIENT RESPONSE OF EPITAXIAL GAAS JFET STRUCTURES TO IONIZING
RADIATION (U), 9 P., (U)
TREE: 361 ; 310

.block

IEEE73-171

.endblock

.block

copy: 1 id: 82766-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-180
AUTH: VANDRE R.H.
CLSS: U
CORP: AEROSPACE CORP. (EL SEGUNDO, CA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (PLASMA FOCUS) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECTS OF SHADOWS ON PHOTOCURRENT COMPENSATED INTEGRATED CIRCUITS
(U), 5 P., (U)
TREE: 320

.block

IEEE73-180

.endblock

.block

copy: 1 id: 82767-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-185
AUTH: TIETZE F.C. ; SANERA A.E. ; VANDRE R.H.
CLSS: U
CORP: IBM ELECTRONICS SYSTEMS CENTER (OWEGO, NY) ; MOTOROLA SEMICONDUCTOR
PRODUCTS DIV. (PHOENIX, AZ) ; AEROSPACE CORP. (LOS ANGELES, CA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (PLASMA FOCUS) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: MINIMAL PHOTOCURRENT ANALOG MULTIPLEXER USING EDGE-ON DIODES (U), 5
P., (U)
TREE: 320

.block

IEEE73-185

.endblock

.block

copy: 1 id: 82768-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-190

AUTH: SROUR J.R.
CLSS: U
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1
DESC: SIMULATION (REACTOR N GENERATOR) ; EXPERIMENTAL
EFFT: NEUTRON
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: STABLE-DAMAGE COMPARISONS FOR NEUTRON-IRRADIATED SILICON (U), 6 P.,
(U)

TREE: 200

.block

IEEE73-190

.endblock

.block

copy: 1 id: 82769-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-196

AUTH: CURTIS O.L. ; SROUR J.R.

CLSS: U

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)

DATE: 7300

DESC: SIMULATION (CO 60 REACTOR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI GE

EFFT: TREE

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973--VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RECOMBINATION WITHIN DISORDERED REGIONS--INFLUENCE OF BARRIER HEIGHT
ON RECOMBINATION RATE AND INJECTION LEVEL EFFECTS (U), 8 P., (U)

TREE: 200

.block

IEEE73-196

.endblock

.block

copy: 1 id: 82770-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-204

AUTH: OTHMER S. ; CURTIS O.L.

CLSS: U

CORP: NORTHROPE RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI

DESC: SIMULATION (REACTOR FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: SCANNING ELECTRON MICROSCOPE MEASUREMENTS OF DIFFUSION LENGTH IN
NEUTRON-IRRADIATED SILICON (U), 5 P., (U)

TREE: 200

.block

IEEE73-204

.endblock

.block

copy: 1 id: 82771-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-209

AUTH: BEEZHOLD W. ; BROWER K.L.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1

DESC: EXPERIMENTAL

EFFT: ION IMPLANTATION

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: ELECTRON PARAMAGNETIC RESONANCE OF THE LATTICE DAMAGE IN
BORON-IMPLANTED INTRINSIC SILICON (U), 5 P., (U)

TREE: 200

.block

IEEE73-209

.endblock

.block

copy: 1 id: 82772-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-214

AUTH: MALLON C.E. ; NABER J.A. ; COLWELL J.F. ; GREEN B.A.

CLSS: U

CONN: F 19628 72 C 0311

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7300

DESC: SIMULATION (LINAC) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 HG CD TE

EFFT: TREE

SUJO: 3-133-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECTS OF ELECTRON RADIATION ON THE ELECTRICAL AND OPTICAL
PROPERTIES OF HGCDTE (U), 6 P., (U)

TREE: 361

.block

IEEE73-214

.endblock

.block

copy: 1 id: 82773-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-220

AUTH: ARNOLD G.W.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI O2

DESC: EXPERIMENTAL

EFFT: ION IMPLANTATION

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: ION-IMPLANTATION EFFECTS IN NONCRYSTALLINE SI02 (U), 4 P., (U)

TREE: 200

.block

IEEE73-220

.endblock

.block

copy: 1 id: 82774-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-224

AUTH: KALMA A.H.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI GE GA AS IN SB PB TE

DESC: SIMULATION (LINAC) ; EXPERIMENTAL

EFFT: BETA

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: IRRADIATION-PRODUCED BAND-TAILING IN SEMICONDUCTORS (U), 5 P., (U)

TREE: 200

.block

IEEE73-224

.endblock

.block

copy: 1 id: 82775-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-229
AUTH: WILLIAMS R.A. ; HENRY R.D. ; CHEN T.T. ; ARCHER J.L.
CLSS: U
CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1
DESC: SIMULATION (REACTOR CO 60 FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-225-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION TOLERANCE OF BUBBLE-DOMAIN MATERIALS AND DEVICES (U), 5
P., (U)
TREE: 343

.block

IEEE73-229

.endblock

.block

copy: 1 id: 82776-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-238
AUTH: FAITH T.J.
CLSS: U
CONN: NAS5 21642
CORP: RCA ASTRO-ELECTRONICS DIV. (PRINCETON, NJ)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts solar cells L1 100-500
DEG K
DESC: SIMULATION (VAN DE GRAAFF) ; EXPERIMENTAL
EFFT: BETA
SUJO: 3-223-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TEMPERATURE DEPENDENCE OF DAMAGE COEFFICIENT IN ELECTRON IRRADIATED
SOLAR CELLS (U), 5 P., (U)
TREE: 362

.block

IEEE73-238

.endblock

.block

copy: 1 id: 82777-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-243
AUTH: CRABB R.L.

CLSS: U
CORP: EUROPEAN SPACE RESEARCH AND TECHNOLOGY CENTER (NOORDWIJK, HOLLAND)
DATE: 7300
DESC: SATELLITES ESRO HEOSA1 PROSPERO ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts solar cells L1
SYNERGISTIC EFFECTS
EFFT: X-RAY ; BETA
SUJO: 3-223-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: PHOTON INDUCED DEGRADATION OF ELECTRON AND PROTON IRRADIATED SILICON
SOLAR CELLS (U), 7 P., (U)
TREE: 362

.block

IEEE73-243

.endblock

.block

copy: 1 id: 82778-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-250
AUTH: HORNE W.E. ; MADARAS B.K. ; RUSSELL D.A.
CLSS: U
CORP: BOEING AEROSPACE CO. (SEATTLE, WA)
DATE: 7300
DESC: SIMULATION (CO 60 LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts solar cells L1
EFFT: TREE
SUJO: 3-223-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ANNEALING MODEL FOR LITHIUM-DOPED SOLAR CELLS (U), 6 P., (U)
TREE: 362

.block

IEEE73-250

.endblock

.block

copy: 1 id: 82779-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-256
AUTH: SHARE S. ; EPSTEIN A.S. ; POLIMADEI R.A.
CLSS: U
CORP: HARRY DIAMOND LABS. (WASH., DC)
DATE: 7300
DESC: SIMULATION (CO 60 REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 LED
EFFT: TREE
SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION DAMAGE AND HARDENING EFFECTS ON COMPENSATED GAAS
LIGHT-EMITTING DIODES (U), 5 P., (U)

TREE: 310 ; 361

.block

IEEE73-256

.endblock

.block

copy: 1 id: 82780-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-261

AUTH: SCHROEDER J.O. ; NOEL B.W. ; SOUTHWARD H.D.

CLSS: U

CONN: AF 29601 68 C 0116

CORP: BATTELLE PACIFIC NORTHWEST LAB. (RICHLAND, WA) ; LOS ALAMOS
SCIENTIFIC LAB. (LOS ALAMOS, NM) ; UNIVERSITY OF NEW MEXICO
(ALBUQUERQUE, NM)

DATE: 7300

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 LASER DIODE

EFFT: NEUTRON

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RADIATION DAMAGE INDUCED TIME DELAY IN GAAS LASERS (U), 5 P., (U)

TREE: 361

.block

IEEE73-261

.endblock

.block

copy: 1 id: 82781-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-266

AUTH: SANGA M.M. ; OLDHAM W.G.

CLSS: U

CONN: 57 9992 ; F 19628 72 C 0215

CORP: UNIVERSITY OF CALIFORNIA (BERKELEY, CA)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 DIODE TRANSISTOR 300 DEG K

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

EFFT: NETURON

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: MEASUREMENT OF NEUTRAL BASE LIFETIME IN NEUTRON-IRRADIATED

TRANSISTORS (U), 8 P., (U)

TREE: 310

.block

IEEE73-266

.endblock

.block

copy: 1 id: 82782-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-274

AUTH: ARIMURA I. ; ROSENBERG C.

CLSS: U

CORP: BOEING AEROSPACE CO. (SEATTLE, WA)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: ANOMALOUS DAMAGE MECHANISM IN PNP SILICON TRANSISTORS DUE TO THERMAL
NEUTRONS (U), 6 P., (U)

TREE: 310

.block

IEEE73-274

.endblock

.block

copy: 1 id: 82783-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-280

AUTH: HARARI E. ; ROYCE B.S.H.

CLSS: U

CONN: N 0014 67A 0151 0026

CORP: PRINCETON UNIVERSITY (PRINCETON, NJ)

DATE: 7300

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MIS CAPACITOR 80-300 DEG
K

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: SIMULATION (X-RAY MACHINE) ; EXPERIMENTAL

EFFT: X-RAY

SUJO: 3-222-000 ; 3-229-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECTS OF ELECTRON AND HOLE TRAPPING ON THE RADIATION HARDNESS OF
A1203 DEVICES (U), 8 P., (U)

TREE: 370

.block

IEEE73-280

.endblock

.block

copy: 1 id: 82784-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-288
AUTH: HARARI E. ; ROYCE B.S.H.
CLSS: U
CONN: N 0014 67A 0157 0026
CORP: PRINCETON UNIVERSITY (PRINCETON, NJ)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MIS CAPACITOR
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI O2
EFFT: ION IMPLANTATION
SUJO: 3-220-200 ; 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: OXIDE CHARGE TRAPPING INDUCED BY ION IMPLANTATION IN SI02 (U), 5 P.,
(U)
TREE: 200

.block

IEEE73-288

.endblock

.block

copy: 1 id: 82785-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-293
AUTH: GREGORY B.L. ; SHAFER B.D.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: SIMULATION (FLASH X-RAY LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: LATCH-UP IN CMOS INTEGRATED CIRCUITS (U), 7 P., (U)
TREE: 325

.block

IEEE73-293

.endblock

.block

copy: 1 id: 82786-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-300
AUTH: BURGHARD R.A. ; GWYN C.W.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION FAILURE MODES IN CMOS INTEGRATED CIRCUITS (U), 7 P., (U)
TREE: 325

.block

IEEE73-300

.endblock

.block

copy: 1 id: 82787-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-307
AUTH: HABING D.H. ; SHAFER B.D.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (REACTOR FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: ROOM TEMPERATURE ANNEALING OF IONIZATION-INDUCED DAMAGE IN CMOS
CIRCUITS (U), 8 P., (U)
TREE: 325

.block

IEEE73-307

.endblock

.block

copy: 1 id: 82788-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE73-315
AUTH: KJAR R.A. ; KINOSHITA G.
CLSS: U
CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 SOS TRANSISTOR

DESC: SIMULATION (LINAC) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TRANSIENT PHOTOCURRENTS IN SOS STRUCTURES (U), 4 P., (U)
TREE: 310

.block

IEEE73-315

.endblock

.block

copy: 1 id: 82789-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-319
AUTH: NIELSEN R.L. ; NICHOLS D.K.
CLSS: U
CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)
DATE: 7300
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MOS CAPACITOR
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 MOS TRANSISTOR
EFFT: TREE
SUJO: 3-221-000 ; 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TOTAL DOSE EFFECTS OF IONIZING RADIATION ON MOS STRUCTURES AT 90
DEGREES K (U), 7 P., (U)
TREE: 325

.block

IEEE73-319

.endblock

.block

copy: 1 id: 82790-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-326
AUTH: LOCKWOOD G.J. ; MILLER G.H. ; HALBLEIB J.A.
CLSS: U
CCDE: ETRAN ; EZTRAN
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: Nuclear Weapon Effects materials metals alloys L1 AL TA
DESC: SIMULATION (ELECTRON ACCELERATOR) ; EXPERIMENTAL
EFFT: BETA
SUJO: 3-243-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.

6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ABSOLUTE MEASUREMENT OF LOW ENERGY ELECTRON DEPOSITION PROFILES IN
SEMI-INFINITE GEOMETRIES (U), 5 P., (U)

TREE: 200

.block

IEEE73-326

.endblock

.block

copy: 1 id: 82791-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-331

AUTH: STEICHEN C.U. ; RETZLER J.P. ; APODACA L.

CLSS: U

CORP: AUTONETICS (ANAHEIM, CA)

DATE: 7300

DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1

DESC: EXPERIMENTAL

SUJO: 4-241-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: IMPROVED LONG PULSE IONIZATION SIMULATIN USING PULSED REACTORS (U),
10 P., (U)

.block

IEEE73-331

.endblock

.block

copy: 1 id: 82792-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-341

AUTH: MCKENZIE J.M. ; WITT L.J.

CLSS: U

CCDE: UNFOLD

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7300

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

SHOT: DIAMOND SCULLS

TSHO: UG-CONTAINED

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: MEASUREMENT OF THE NEUTRON ENERGY DEPENDENCE OF BASE CURRENT
DEGRADATION OF A SILICON BIPOLAR TRANSISTOR (U), 8 P., (U)

TREE: 310

.block

IEEE73-341

.endblock

.block

copy: 1 id: 82793-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-349
AUTH: COPPAGE F.N.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7300
DESC: SIMULATION (REACTOR INSULATED CORE TRANSFORMER) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: NEUTRON
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EXPERIMENTAL NEUTRON DAMAGE EQUIVALENCES UTILIZING DEVICE PARAMETERS
(U), 5 P., (U)
TREE: 310

.block

IEEE73-349

.endblock

.block

copy: 1 id: 82794-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-354
AUTH: MILLWARD D.G. ; ARIMURA I.
CLSS: U
CONN: F 29601 71 C 0001
CORP: BOEING AEROSPACE CO. (SEATTLE, WA)
DATE: 7300
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: HARDNESS ASSURANCE THROUGH LOT SAMPLING -HOMOGENEITY STUDIES (U), 7
P., (U)
TREE: 610

.block

IEEE73-354

.endblock

.block

copy: 1 id: 82795-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-361
AUTH: TAUSCH N.J. ; ANTINONE R.J. ; BAILEY R.A.
CLSS: U
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
EFFT: NETURON
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: SIMPLE TRANSISTOR NEUTRON HARDNESS SCREEN USING SCATTERING
PARAMETERS (U), 9 P., (U)
TREE: 649

.block

IEEE73-361

.endblock

.block

copy: 1 id: 82796-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-370
AUTH: ARIMURA I.
CLSS: U
CONN: F I9601 71 C 0001
CORP: BOEING AEROSPACE CO. (SEATTLE, WA)
DATE: 7300
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
EFFT: NETURON
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: INVESTIGATIONS OF AN IRRADIATE-ANNEAL TECHNIQUE FOR NEUTRON HARDNESS
ASSURANCEOF POWER TRANSISTORS (U), 7 P., (U)
TREE: 610

.block

IEEE73-370

.endblock

.block

copy: 1 id: 82797-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-377
AUTH: VAIL P.J. ; MULLIS J.L.
CLSS: U

CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7300
DESC: SIMULATION (REACTOR CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: NETURON
SUJO: 3-221-000 ; 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: VARIATIONS OF NEUTRON DEGRADATION ACROSS WAFERS (U), 6 P., (U)
TREE: 649

.block

IEEE73-377

.endblock

.block

copy: 1 id: 82798-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-383
AUTH: PECKERAR M.C.
CLSS: U
CORP: NASA, GODDARD SPACE FLIGHT CENTER (GREENBELT, MD)
DATE: 7300
DESC: SIMULATION (SEM) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRON-BEAM STUDIES OF SCHOTTKY-BARRIER DETECTOR SURFACES (U), 5
P., (U)
TREE: 360

.block

IEEE73-383

.endblock

.block

copy: 1 id: 82799-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE73-388
AUTH: GUTMANN R.J. ; BORREGO J.M. ; COTTRELL P.E. ; GHANDI S.K.
CLSS: U
CONN: F 19628 72 C 0112
CORP: RENSSELAER POLYTECHNIC INSTITUTE (TROY, NY)
DATE: 7300
DESC: SIMULAION (LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio
microwave systems L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes

silicon-controlled rectifiers L1 IMPATT DIODE

EFFT: TREE
SUJO: 3-132-000 ; 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1973; VOL. NS-20, NO.
6, ANNUALCONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: PERFORMANCE OF INJECTION LOCKED IMPATT OSCILLATORS UNDER TRANSIENT
IONIZING RADIATION (U), 5 P., (U)
TREE: 367

.block

IEEE73-388

.endblock

.block

copy: 1 id: 82800-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74
CLSS: U
CORP: INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (NEW YORK,
NY)
DATE: 7412
REPN: NS 21
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TITL: ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS; COLORADO
STATE UNIVERSITY, FORT COLLINS, COLORADO, JULY 15-18, 1974 (U), 411
P., (U)
TREE: 300

.block

IEEE74

.endblock

.block

copy: 1 id: 54391-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74
CLSS: U
CORP: IEEE (NEW YORK, NY) ; INSTITUTE OF ELECTRICAL AND ELECTRONICS
ENGINEERS (NEW YORK, NY)
DATE: 7400
REPN: IEEE VOL. NS 21 NO. 6
TITL: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS, COLORADO STATE
UNIVERSITY, FORT COLLINS, CO, JULY 15-18, 1974 (U), 410 P., (U)

.block

IEEE74

.endblock

.block

copy: 1 id: 82801-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-014

ABS: Electron irradiation induced changes in both the photo-and cathodo-luminescence spectra of high purity CdS platelets have been monitored over a wavelength range from 4800 angstrom to 2 micrometers. The irradiations were all performed near 10K using beam energies from 100 keV to 1 MeV. By irradiating with electron energies between the cadmium and sulfur displacement thresholds, and above the cadmium displacement threshold, the damage induced luminescence could be assigned to specific sublattices. In the bound exciton spectral region near the band edge, all exciton lines present before irradiation were observed to decrease in intensity with the exception of the mission line at 4867A. This line was observed to grow in absolute intensity for irradiation energies above the sulfur displacement threshold.

ABS: We attribute the 4867 angstrom emission to the decay of an exciton bound to a shallow neutral donor state associated with the sulfur vacancy. The edge emission was found to decay in intensity when observed by photoluminescence but to increase in intensity when excited by 100 keV electrons following an irradiation above the sulfur displacement threshold. Broad band luminescence has also been produced by irradiation at 7200 angstrom and 1.03 micrometer. The 7200 angstrom is not observed, however, until a thermal anneal is performed above a recovery stage centered at 180 K. The edge emission and bound exciton emission partially recover in this same temperature range. Another annealing stage is observed at 230K by monitoring the intensity of emission bands at 1.03 and 1.65 micrometer.

ABS: The annealing stage at 180 K is associated with sulfur sublattice damage recovery while the stage at 230 K is due to recovery of cadmium sublattice damage.

AUTH: ELSBY C.N. ; MEESE J.M.

CLSS: U

CONN: F 33615 71 C 1877

CORP: AEROSPACE RESEARCH LABS. (WRIGHT-PATTERSON AFB, OH) ; DAYTON U. (DAYTON, OH)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: LUMINESCENCE IN ELECTRON IRRADIATED CDS (U), 7 P., (U)

.block

IEEE74-014

.endblock

.block

copy: 1 id: 82802-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-021

ABS: Photoconductivity measurements performed under carefully controlled conditions have revealed that the dominant defects in low temperature, electron irradiated n-type Ge are optically active,

double-acceptor type defects which thermally anneal at a temperature around 65 degrees K. The stability of these defects is sensitive to temperature, background light levels, irradiation fluenced and fluxes, and probably impurity type and concentration. It is concluded from the result of this and other studies that the optically active defect is probably in isolated vacancy.

AUTH: ARIMURA I.
CLSS: U
CORP: BOEING AEROSPACE CO. (SEATTLE, WA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: PHOTOABSORPTION EFFECTS IN LOW TEMPERATURE ELECTRON-IRRADIATED
GERMANIUM (U), 5 P., (U)

.block

IEEE74-021

.endblock

.block

copy: 1 id: 82803-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-026

ABS: Displacement damage in InSb is calculated for 1MeV and 14MeV incident neutrons. Ranges and energy deposition profiles are calculated with the E-DEP-1 computer code and combined with published neutron cross sections to obtain atomic displacement rates and range distributions. The damage ratio of 14MeV to 1MeV neutrons is estimated as close to unity. Comparison results are presented for Si. Experimental verification for unity damage ratio is given.

AUTH: GUENZER C.S. ; MANNING I.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: CALCULATED DISPLACEMENT DAMAGE BY NEUTRONS IN INSB (U), 4 P., (U)

.block

IEEE74-026

.endblock

.block

copy: 1 id: 82804-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-030

ABS: Radiation effects on the electrical conductivity, Hall mobility, and carrier density were studied on three different types of p-type PbSnTe samples. One type (sample 1) was vapor-grown with an initial carrier density of approximately 4×10^{16} cm⁻³, and was irradiated with 30-MeV electrons at 78 degrees K. Another type (sample 2), which was cut from a solid-state recrystallized boule

and then annealed to lower its carrier concentration to approximately 8×10^{17} cm⁻³, was also irradiated with 30-MeV electrons at 78 degrees K. The other type of specimen (sample 3) was an epitaxially deposited thin film on a BaF sub 2, substratum, with a carrier concentration of approximately 4×10^{17} cm⁻³. It was electron-irradiated at 9 degrees K and subsequently gamma-and neutron-irradiated at 78 degrees K.

ABS: Temperature dependence of the optical transmission for sample 3 was performed to determine the radiation dependence of the energy bandgap. For the low-carrier sample (1), electron fluence up to 6.5×10^{15} e/cm² at 78 degrees K produced increases in the conductivity and carrier density. Initially the Hall mobility increased, then decreased with fluences above 2×10^{15} e/cm². Sample 2 was electron-irradiated at 78 degrees K to a maximum fluence of 2.45×10^{15} e/cm². Both the conductivity and carrier density exhibited linear decreases with fluence, while the Hall mobility initially decrease slightly, but later increased. Sample 3 was electron-irradiated at approximately 9 degrees K, where carrier removal similar to that in sample 2 was observed.

ABS: The curve of carrier density versus temperature was quite flat below liquid-nitrogen temperatures. In preparation for a neutron irradiation, sample 3 was gamma-irradiated to levels expected during a neutron irradiation to see the effects of gamma irradiation only. No detectable change of the electrical or optical properties was observed. Subsequently, sample 3 was neutron-irradiated at 78 degrees K. Neutron fluence dependence of the electrical parameters yielded linear decreases with fluence. A model is proposed that qualitatively explains the data of the temperature dependence of the carrier density and conductivity and on carrier removal or addition as a function of initial density.

AUTH: HARPER H.T. ; GREEN B.A. ; LEADON R.E. ; NABER J.A.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA) ; IRT CORP. (SAN DIEGO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECTS OF IRRADIATION ON THE ELECTRICAL AND OPTICAL PROPERTIES OF PBSNTE (U), 4 P., (U)

.block

IEEE74-030

.endblock

.block

copy: 1 id: 82805-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-034

ABS: We present a theoretical model for the effects of electron irradiation on the bulk electronic energy band parameters of HgCdTe. The material is treated as degenerate. We predict irradiation induced changes in the shape of spectral response and resolve apparent inconsistencies in the HgCdTe photoresponse data.

Qualitative, overall changes in photoconductive detector response are predicted and we find a general trend that short wavelength materials are less susceptible to the effects of radiation.

AUTH: SHEPHERD F.D. JR.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LAB. (BEDFORD, MA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION EFFECTS ON THE SPECTRAL RESPONSE OF HGCDTE (U), 6 P., (U)

.block

IEEE74-034

.endblock

.block

copy: 1 id: 82806-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-040

ABS: Indium sesquitelluride is typical of a large class of defect semiconductors which are tetrahedrally bonded but which possess room temperature vacancy concentrations of the order of 5.5×10^{21} cm⁻³. It has been proposed by V.M. Koshkin et al. that these semiconductors cannot preserve non-equilibrium point defect concentrations. This hypothesis has been tested in the present experiments by electron irradiating in indium sesquitelluride at 77 K with 1 MeV electrons and using electron paramagnetic resonance (EPR) to observe the results. Several difference resonances have been observed with g values ranging from 1.979 to 2.133 and possessing X-band line widths of 7 to 42 gauss.

ABS: All of the resonances except the largest one at g equals 2.019 have orientation dependent g values and all anneal at different temperatures suggesting that several different defect centers have been produced. Because the 1 MeV electron defect production rate for these centers at 77 K (0.01 to 0.1 defects/electron) is typical of defect production rates observed in other compound semiconductors, the hypothesis proposed by Koshkin et al. is incorrect. The stability of these defects is somewhat lower than in non-defect semiconducting compounds, however, since none of these defects survive prolonged room temperature annealing and since no additional complex centers formed by thermal annealing have been detected.

AUTH: SWENSON H. ; LOCKER D.R. ; MEESE J.M. ; MANTHURUTHIL
CLSS: U
CORP: AEROSPACE RESEARCH LABS. (WRIGHT-PATTERSON AFB, OH) ; DAYTON U.
(DAYTON, OH)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRON DAMAGE IN INDIUM SESQUITELLURIDE--A DEFECT TETRAHEDRAL
SEMICONDUCTOR (U), 7 P., (U)

.block

IEEE74-040

.endblock

.block

copy: 1 id: 82807-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-047

ABS: Rapid annealing after radiation and field injection characteristics of Al sub 2 O sub 3, MIS capacitors have been investigated by means of a fast C-V measurement technique. The results indicate that electron injection under positive bias and trapping of radiation-generated holes are dominated by an interface transition region at the Si--Al sub 2 O sub 3, angstrom from the Si substrate to account for the observations. The field injection charging characteristics are well described by a model invoking direct tunneling of electrons from the Si valence band into electron traps in the interface transition region with an energy distribution consistent with field-injected photo-depopulation studies.

AUTH: MCLEAN F.B. ; BOESCH H.E. JR. ; WINOKUR P.S. ; MCGARRITY J.M. ;
OSWALD R.B. JR.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: RAPID ANNEALING AND CHARGE INJECTION IN AL SUB 2 O SUB 3 MIS
CAPACITORS (U), 9 P., (U)

.block

IEEE74-047

.endblock

.block

copy: 1 id: 82808-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-056

ABS: Defect center production in irradiated silica is shown to exceed that found in stoichiometric SiO sub 2. The defect centers observed are the E' type which are associated with oxygen vacancies. It is suggested that a large concentration of E' centers is expected near the oxygen deficient Si-SiO sub 2, interface of irradiated MOS devices and that the presence of these defects is one source of positive space charge buildup within the first hundred Angstroms of the oxide. In addition, the 4500 Angstrom emission band observed in irradiation SiO sub 2, has been shown to be associated with the decay of E' centers.

AUTH: SIGEL G.H. JR. ; FRIEBELE E.J. ; GINTHER R.J. ; GRISCOM D.L.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: EFFECTS OF STOICHIOMETRY ON THE RADIATION RESPONSE OF SIO SUB 2 (U),

6 P., (U)

.block

IEEE74-056

.endblock

.block

copy: 1 id: 82809-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-062

ABS: The effects of light and heavy ion bombardment on Na and Cl motion in SiO sub 2:Si thin films have been studied using proton-induced characteristics x-ray (PIX) and Rutherford backscattering (RBS) techniques. Results show that both Na and Cl atoms may be trapped in the oxides by implantation damage. Release does not occur under ionizing irradiation (proton bombardment). Partial release or motion does occur after annealing to 700 degrees C or by further heavy ion bombardments. Na motion is consistent with the movement of single Na+ ions in the oxide. In contrast, the movement of Cl atoms appears to be dominated by enhanced Cl diffusion or by motion of positive Cl-defect complexes whenever heavy ion bombardment damage is introduced.

AUTH: BEEZHOLD W.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECTS OF ION BOMBARDMENT ON NA AND CL MOTION IN SIO2 THIN FILMS (U), 5 P., (U)

.block

IEEE74-062

.endblock

.block

copy: 1 id: 82810-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-067

ABS: The distribution of sodium in the oxide films of MOS capacitors was determined by etch-off procedures, using sodium-22 as a tracer. The effects on sodium distribution of ionizing radiation, of indiffused aluminum, and of bias-temperature stressing were then determined and compared with C-V measurements of the total oxide charge in the same samples. Aluminum films sintered for 30 minutes at 500 degrees C provided high aluminum concentrations (approximately 10 super 20/cm cubed) in the oxide near the surface, while sintering for 60 minutes caused aluminum to diffuse about three times deeper. In both cases low concentrations (approximately 10 super 18/cm cubed) were found next to the silicon.

ABS: Aluminum-rich portions of the oxide were found to trap sodium, and thus the oxides with the 30-minute aluminum sinter had very little

sodium concentrated near the silicon substrate (0.2 to 0.6×10^{11} super 11/cm squared); the interfacial sodium accounted for only 2% of the oxide charge determined by C-V measurements. Oxides without aluminum or with 60-minute aluminum sinter had nearly 10-fold higher interfacial sodium concentrations (1 to 6×10^{11} super 11/cm squared) and this interfacial sodium accounted for 10% of the oxide charge from C-V measurements. Ionizing radiation (10 super 6 rads in one hour from cobalt-60 at 25 degrees C with a positive bias of 10 super 6 volts/cm) increased the total oxide charge by 14 to 17×10^{11} electronic charges/cm squared, but caused very small increases in interfacial sodium (0.2 to 0.9×10^{11} ions/cm squared).

ABS: However, the combination of ionizing radiation followed by positive bias stress (10 super 6 volts/cm) at 300 degrees C for 10 minutes caused an appreciable movement of sodium to the interface in some of the oxides, especially those with no aluminum or with aluminum sintered for 60 minutes. Positive bias at 300 degrees C for 10 minutes in aluminum-doped oxides caused large increases in negative voltage shifts (corresponding to an increase of 10 to 20×10^{11} positive charges per cm squared) but in the same tests no more than 3×10^{11} sodium ions per cm squared moved into the oxide next to the silicon substrate. These results suggest that the drift of positively charged aluminum interstitials may be the cause of much of the voltage shift in 300 degrees C tests.

AUTH: FOWKES F.M. ; WITHERELL F.E.

CLSS: U

CORP: LEHIGH U. (BETHLEHEM, PA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: SODIUM MOBILITY IN IRRADIATED SIO SUB 2 (U), 6 P., (U)

.block

IEEE74-067

.endblock

.block

copy: 1 id: 82811-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-073

ABS: Charge transport studies have been performed on SiO sub 2 films using an electron-beam injection technique. MOS capacitors incorporating oxides grown at 1000 and 1100 degrees C were investigated, including units fabricate at Hughes Aircraft using radiation hardening procedures. A comparison of beam-induced current vs field characteristics is made for devices with differing processing histories. Additionally, experimental determinations of trapped positive charge vs collected charge were performed. Present findings indicate that holes are mobile in SiO sub 2, that the schubweg model is insufficient for describing charge transport in SiO sub 2 films, and that the electron-hole pair creation energy for SiO sub 2 is less than about 19 eV. Current vs field data be qualitatively explained in terms of columnar and/or geminate recombination.

ABS: Conclusions concerning the effects of processing on charge buildup are made and a qualitative model based on experimental findings is presented. Implications of this model for radiation hardening are discussed.

AUTH: SROUR J.R. ; CURTIS O.L. JR. ; CHIU K.Y.

CLSS: U

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: CHARGE TRANSPORT STUDIES IN SIO SUB 2: PROCESSING EFFECTS AND IMPLICATIONS FOR RADIATION HARDENING (U), 8 P., (U)

.block

IEEE74-073

.endblock

.block

copy: 1 id: 82812-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-081

AUTH: MATTERN P.L. ; WATKINS L.M. ; SKOOG C.D. ; BRANDON J.R. ; BARSIS E.H.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7412

DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical devices sensors IR detectors L1

DESC: SIMULATION (CO 60 FLASH X-RAY) ; EXPERIMENTAL

EFFT: TREE

SUJO: 3-133-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21, NO. 6

TITL: EFFECTS OF RADIATION ON THE ABSORPTION AND LUMINESCENCE OF FIBER OPTICAL WAVEGUIDES AND MATERIALS (U), 14 P., (U)

TREE: 361

.block

IEEE74-081

.endblock

.block

copy: 1 id: 54392-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-081

ABS: Irradiation of fiber optic waveguides with X-rays, gamma-rays, electrons, or neutrons can cause luminescence and losses in optical transmission. These effects have been measured, using pulsed and continuous radiation sources, in bulk materials and in most commercially available fiber bundles. Some important effects of dopants and impurities such as Ge, Ti, Fe, Al, and OH on radiation-resistance have also been determined. Transient absorption

and luminescence were measured from 10 ns to 0.1s after irradiation (10 to 10 super 6 rads and 10 super 9 to 10 super 13 rads/sec), and the permanent absorption was measured from 24 to 72 hours after irradiation (10 super 3 to 10 super 9 rads).

ABS: These results show that synthetic vitreous silica (undoped), some doped silicas, polymethylmethacrylate and polystyrene can be used in radiation environments that are encountered in space and military applications. The utility of each of these fibers depends on the particular radiation environment, the length of waveguide, the wavelength of signal light, the time any system can be 'off the air', and constraints imposed by fiber cost. The data can be used to determine the response of actual fiber systems during and after irradiation.

AUTH: MATTERN P.L. ; WATKINS L.M. ; SKOOG C.D. ; BANDON J.R. ; BARSIS E.H.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECTS OF RADIATION ON THE ABSORPTION AND LUMINESCENCE OF FIBER
OPTIC WAVEGUIDES AND MATERIALS (U), 15 P., (U)

.block

IEEE74-081

.endblock

.block

copy: 1 id: 82813-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-096
AUTH: POLIMADEI R.A. ; SHARE S. ; EPSTEIN A.S. ; LYNCH R.J. ; SULLIVAN D.
CLSS: U
CORP: HARRY DIAMOND LABS. (WASH., DC) ; IBM FEDERAL SYSTEMS DIV. (OWEGO,
NY)
DATE: 7412
DESC: SIMULATION (CO 60 PULSED REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 LED
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: TREE
SUJO: 3-133-000 ; 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TITL: PERFORMANCE OF GA 1-X AL X AS LIGHT EMITTING DIODES IN RADIATION
ENVIRONMENTS (U), 6 P., (U)

TREE: 310

.block

IEEE74-096

.endblock

.block

copy: 1 id: 54393-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-096

ABS: Addition of aluminum as a cation substituent in GaAs improves the relative radiation hardness of the GaAs light emitting diode, as deduced from both gamma and neutron irradiation experiments to 10^8 rads (Si) and 3.5×10^{13} neutrons/cm squared, respectively. The gamma damage coefficient, K_{γ} , shows a marked and unexpected decrease from 52 (rads (Si) $^{-1}$) to about 2 (rads (Si) $^{-1}$) in the composition range from GaAs to about Ga sub .90, Al sub .10, As. Above 10% Al content, the damage coefficient changes only slightly. On the other hand, the neutron damage coefficient K_n shows a gradual change over the entire compositional range from 0 to 34% aluminum. Annealing of the gamma-irradiated samples indicates that the 240 degrees C stage noted for GaAs and attributed to an arsenic vacancy is reduced with addition of aluminum.

ABS: On the other hand the annealing of the Ga sub 1-x, Al sub x, As samples following neutron irradiation indicates that the annealing characteristics are virtually independent of the aluminum composition. For both types of irradiation there is a shift of the peak emission wavelength to shorter wavelengths following irradiation.

AUTH: POLIMADEI R.A. ; SHARE S. ; EPSTEIN A.S. ; LYNCH R.J. ; SULLIVAN D.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., DC) ; IBM FEDERAL SYSTEMS DIV. (OWEGO, NY)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: PERFORMANCE OF GA SUB 1-X, AL SUB X, AS, LIGHT EMITTING DIODES IN RADIATION ENVIRONMENTS (U), 7 P., (U)

.block

IEEE74-096

.endblock

.block

copy: 1 id: 82814-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-103

ABS: The effects of high-energy neutron irradiation on the photoconductive properties of chemically-deposited PbS infrared detectors have been investigated in the 10^8 to 10^{14} n/cm squared fluence range. Long term degradation in signal response has been observed subsequent to room temperature irradiation of 2×10^{12} n/cm squared or greater fluences. Seventy-five percent of the degradation can be attributed to a reduction in majority carrier lifetime, and the most likely source for the additional 25% reduction in the photoconductivity is not permanent. The recovery proceeds logarithmically with time. The dark resistance was unaffected by the irradiation. Additionally, if the

detector views a visible light source simultaneously with the neutron irradiation, a significant increase in signal degradation rate is found.

AUTH: MOLNAR B.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: FAST NEUTRON IRRADIATION DAMAGE ON ROOM TEMPERATURE PBS DETECTORS
(U), 4 P., (U)

.block

IEEE74-103

.endblock

.block

copy: 1 id: 82815-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-107

ABS: A code is presented to predict the statistics of transient responses to gamma radiation of rectangular solid state devices. Use of the chordlength distribution and assuming the radiation flux isotropic obviates use of Monte Carlo techniques, so that the code runs fast enough for exploratory use. It is discovered that, for small detectors, relatively large-area non-square thin detectors are advantageous.

AUTH: VICKERS V.E. ; SHEPHERD F.D. JR. ; BURKE E.A.

CLSS: U

CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: IONIZING RADIATION DOSIMETRY AND NOISE IN SMALL GEOMETRY DEVICES
(U), 6 P., (U)

.block

IEEE74-107

.endblock

.block

copy: 1 id: 82816-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE-113

AUTH: EVANS B.D. ; SIGEL G.H. JR.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7412

DESC: SIMULATION (CO 60 FLASH X-RAY) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1

EFFT: TREE

SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TITL: PERMANENT AND TRANSIENT RADIATION INDUCED LOSSES IN OPTICAL FIBERS
(U), 6 P., (U)

TREE: 361

.block

IEEE74-113

.endblock

.block

copy: 1 id: 54395-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-113

ABS: With the deployment of fiber optical data transmission links in
military and domestic communications systems which may be subjected
to various levels of ionizing radiation it is of interest to
determine both the permanent and transient radiation-induced optical
transmission loss in both fibers and relevant bulk glasses. Loss
produced by both Co-60 gamma-irradiation and by pulsed electron (0.5
MeV) irradiation in both high-loss and low-loss fibers is presented.
Luminescence for some hundreds of microseconds following pulsed
electron irradiation of low-loss fibers is briefly discussed in
terms of possible electromagnetic interference effects.

AUTH: EVANS B.D. ; SIGEL G.H. JR.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: PERMANENT AND TRANSIENT RADIATION INDUCED LOSSES IN OPTICAL FIBERS
(U), 6 P., (U)

.block

IEEE74-113

.endblock

.block

copy: 1 id: 82817-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-119

AUTH: LONG D.M.

CLSS: U

CONN: F 19628 72 C 0335

CORP: GENERAL ELECTRIC CO., REENTRY AND ENVIRONMENTAL SYSTEMS DIV.
(PHILADELPHIA, PA.)

DATE: 7412

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS

EFFT: TREE

SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6

TITL: TRANSIENT RADIATION RESPONSE OF JFETS AND MISFETS AT CRYOGENIC
TEMPERATURES (U), 5 P., (U)

TREE: 310

.block

IEEE74-119

.endblock

.block

copy: 1 id: 54396-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-119

ABS: This paper provides experimental and analytical data on the transient radiation response and d.c. electrical characteristics of JFETs and MISFETs at cryogenic temperatures. Experimental measurements were performed on commercially available silicon devices over the temperature range 4.2 degrees K to 300 degrees K. A 2 Mev Flash X-ray Facility was used for the photocurrent measurements. The theoretical effort provides a compilation of silicon properties at cryogenic temperatures and scopes out the first-order temperature dependence of JFETs and MISFETs.

ABS: It was observed that (a) the MISFET functioned well at channel temperatures down to 4.2 degrees K, (b) the JFET would not conduct current at channel temperatures below 50 degrees K (though it could be held on by self-heating at case temperatures down to 4.2 degrees K), (c) the photocurrents of each device enhanced by a factor of 2 or more at temperatures below 40 degrees K. The results are in general agreement with first-order theory, but many problems must be resolved to achieve adequate modeling and understanding of relevant phenomena.

AUTH: LONG D.M.

CLSS: U

CORP: GENERAL ELECTRIC (PHILADELPHIA, PA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: TRANSIENT RADIATION RESPONSE OF JFETS AND MISFETS AT CRYOGENIC
TEMPERATURES (U), 5 P., (U)

.block

IEEE74-119

.endblock

.block

copy: 1 id: 82818-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-124

ABS: Studies of channel mobility reduction in P channel MOSFETS with gamma and/or neutron irradiation are reported. For pure gamma

irradiation, the reduction in mobility is caused by increased surface charge scattering. The surface charge scattering mobility is found to have a temperature and surface charge dependence of $T^{-0.5}$ over N sub SC. For pure neutron irradiation, the reduction in channel mobility arises from scattering at neutron-produced bulk-centers. In reactor neutron irradiations, gamma fluence can be as important as the neutron fluence in reducing channel mobility.

AUTH: GAW E.T. ; OLDHAM W.G.
CLSS: U
CORP: U. OF CALIFORNIA (BERKELEY, CA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: PROPERTIES OF HEAVILY IRRADIATED MOSFETS (U), 6 P., (U)

.block

IEEE74-124

.endblock

.block

copy: 1 id: 82819-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-130
AUTH: HORNE W.E. ; WILKINSON M.C.
CLSS: U
CORP: BOEING AEROSPACE CO. (SEATTLE, WA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: IMPROVED MODEL FOR PREDICTING SPACE PERFORMANCE OF SOLAR CELLS (U),
8 P., (U)

.block

IEEE74-130

.endblock

.block

copy: 1 id: 82820-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-138
ABS: Domain wall mobility changes have been observed in magnetic bubble domain materials (rare-earth iron garnet films) following irradiation with 3 MeV protons to fluences of 5×10^{16} p/cm squared and 10^{17} p/cm squared. The mobility was observed to decrease by 24% and 43%, respectively. No measurable changes in the coercive field have been observed. Similar experiments with 1 MeV electrons to 10^{16} e/cm squared and 14 MeV neutrons to 10^{14} n/cm cubed have yielded negative results. A damage threshold of about 10^{16} p.cm squared at 3 MeV is established and a fast neutron damage threshold is inferred to be about 10^{18} n/cm squared. A slight broadening of the ferromagnetic resonance linewidth following the proton irradiations is evidence of increased

magnetic damping caused by displacement damage in the garnet films.

AUTH: WILSEY N.D. ; LESSOFF H.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RADIATION INDUCED MOBILITY CHANGES IN BUBBLE-DOMAIN MATERIALS (U), 3
P., (U)

.block

IEEE74-138

.endblock

.block

copy: 1 id: 82821-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-141

ABS: A comprehensive summary of the effects of pulsed ionizing radiation
on the operation of several types of passive surface acoustic wave
devices is presented. Three distinct types of malfunction were
observed and are discussed in detail. In addition, the effects of
neutron and Co-60 gamma permanent displacement damage on the
operation of a monolithic SAW amplifier are presented.

AUTH: BERG N. ; UDELSON B.J.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: NUCLEAR RADIATION EFFECTS ON SURFACE ACOUSTIC WAVE DEVICES (U), 8
P., (U)

.block

IEEE74-141

.endblock

.block

copy: 1 id: 82822-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-149

ABS: This paper discusses two problems: the partitioning of bipolar
transistor breakdown voltage between the collector and the base in
the context of neutron tolerance, and the dependence of collector
photocurrent on substrate doping. It is suggested that enhanced
neutron tolerance for a given breakdown voltage may sometimes be
achieved by increasing the basewidth so that a portion of the
breakdown voltage is supported by the base. Peak current gains of
ten were achieved with a four micron basewidth after exposure to
3x10 super 14, neutrons (1 MeV eq.) cm super -2. Substrate
photocurrents were found to be very dependent on substrate doping;
by using a substrate doping of 10 super 20, cm super -3, substrate

photocurrents were suppressed to an equivalent silicon photocurrent
collection length of three microns.

AUTH: CLARK L.E. ; SALTICH J.L.
CLSS: U
CORP: MOTOROLA SEMICONDUCTOR PRODUCTS DIV. (PHOENIX, AZ)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: OPTIMIZED PROFILES FOR NEUTRON AND PHOTOCURRENT HARDENED POWER
TRANSISTORS (U), 3 P., (U)

.block

IEEE74-149

.endblock

.block

copy: 1 id: 82823-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-152
AUTH: SCHLESIER K.M.
CLSS: U
CONN: F 19628 73 C 0146
CORP: RCA LABS. (PRINCETON, NJ)
DATE: 7412
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability
L1
DESC: SIMULATION ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000 ; 4-170-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TITL: RADIATION HARDENING OF CMOS/SOS INTEGRATED CIRCUITS (U), 7 P., (U)
TREE: 430 ; 325

.block

IEEE74-152

.endblock

.block

copy: 1 id: 54399-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-152
ABS: Radiation tolerant CMOS circuits can be made by building them in a
thin film of silicon-on-sapphire (SOS) with a hard gate dielectric.
Radiation effects in MOS devices are reviewed, and the problems
associated with radiation tolerant CMOS/SOS devices are described.
Some gate dielectric techniques which show promise in hardening CMOS
circuits are presented, and the radiation behavior of Al sub 2 O sub
3, gate dielectrics are described.
AUTH: SCHLESIER K.M.
CLSS: U

CORP: RCA LABS. (PRINCETON, NJ)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION HARDENING OF CMOS/SOS INTEGRATED CIRCUITS (U), 7 P., (U)

.block

IEEE74-152

.endblock

.block

copy: 1 id: 82824-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-159

ABS: Electrical measurements are described of grown silicon dioxide thin films irradiated by gamma rays, X-rays and broad band VUV light. The dependence of radiation sensitivity on processing variations, including annealing temperature, is compared for unimplanted SiO₂ and SiO₂ implanted with aluminum, argon, xenon and cerium. The flatband voltage shift is suppressed under positive irradiation bias by each of these chemically disparate ions. This finding suggests that the implantation of ions at energies of several kilovolts, with fluences of 10 super 14 to 19 super 15, cm super -2, improves hardness by the production of similar distributions of electron traps with densities of the order of 10 super 12 traps cm super -2, by lattice damage and not by the direct combination of the ion with intrinsic or radiation-induced hole traps.

ABS: This is supported by observations that the effect anneals out gradually at temperatures between 300 degrees C and 1000 degrees C and that the same traps can be neutralized by injection of photoelectrons into the oxide. It is thus confirmed that ion implantation into the dielectric is a versatile method for producing radiation-tolerance under positive bias in silicon dioxide. A further finding is that broadband VUV light from a H₂ discharge lamp can conveniently and closely simulated the radiation response caused by gamma and X-rays in a wide range of dielectrics for MOS devices.

AUTH: EMMS C.G. ; HOLMES-SIEDLE A.G. ; GROOMBRIDGE I. ; THOMSON J.J. ;
BOSNELL J.R.

CLSS: U

CORP: GEC HIRST RESEARCH CENTER (WEMBLEY, ENGLAND) ; UNIVERSITY OF READING
(ENGLAND) ; ROYAL RADAR ESTABLISHMENT (MALVERN, ENGLAND)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: GAMMA AND VACUUM ULTRAVIOLET IRRADIATIONS OF ION IMPLANTED SiO₂ FOR
MOS DIELECTRICS (U), 8 P., (U)

.block

IEEE74-159

.endblock

.block

copy: 1 id: 82825-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-167

ABS: It has previously been demonstrated that the growth conditions of thermal SiO₂ can be optimized to give acceptable operating performance for P-MOS devices and circuits after ionizing radiation dose levels of 10 super 7, rads and above. Further work has since been done to apply this hardening technology to CMOS circuits, with very promising results. Also studied were the effects of adding HCl gettering,, chrome doping, and aluminum ion implantation to the hardened SiO₂. Each of these additions, when properly employed, was found to give improved hardening. The nature of these improvements is described in this paper, along with their applicability to the fabrication of CMOS circuits with improved hardness but which retain all the other advantages of the SiO₂ gate insulator.

ABS: Since all process variations were performed in the same laboratory under otherwise identical conditions, the results presented here represent a true comparison of the various hardening techniques.

AUTH: AUBUCHON K.G. ; HARARI E. ; LEONG D.H. ; CHANG C.P.

CLSS: U

CORP: HUGHES AIRCRAFT CO. (NEWPORT BEACH, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECT OF HCL GETTERING, CR COPING AND AL+ IMPLANTATION ON HARDENED SIO₂ 1 (U), 5 P., (U)

.block

IEEE74-167

.endblock

.block

copy: 1 id: 82826-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-172

ABS: Data characterizing the transient annealing of the gate threshold voltage of contemporary CMOS transistors following exposure to pulsed ionizing radiation are presented and discussed. Devices tested during the study include those fabricated on both bulk silicon and silicon-on-sapphire substrates. Silicon dioxide and aluminum phenomena associated with charge formation in dielectric substrates or dielectric isolation layers are also considered.

AUTH: SIMONS M.

CLSS: U

CORP: RESEARCH TRIANGLE INSTITUTE (RESEARCH TRIANGLE PARK, NC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RAPID ANNEALING IN IRRADIATED CMOS TRANSISTORS (U), 7 P., (U)

.block

IEEE74-172

.endblock

.block

copy: 1 id: 82827-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-179

ABS: Previous efforts to effectively investigate and model the high-field charging phenomenon in pyrolytic Al sub 2, O sub 3, have been thwarted by the difficulty of separating the injection and trapping phenomena. Characterizing the injection is extremely difficult because the interface electric field varies as charge accumulates in traps, and the varying field produces rapidly varying currents, making it equally difficult to ascertain trapping behavior. In this work high-field electron injection and photoinjection into Al sub 2, O sub 3, are investigated using new experimental techniques which maintain constant the interface fields and injection currents, thereby permitting independent determination of injection and trapping characteristics.

ABS: It is shown that the electron trapping in Al sub 2, O sub 3, MIS structures is strongly localized near the Si-Al sub 2, O sub 3, and metal-Al sub 2, O sub 3, interface regions. Comparisons of electron injection from the metal and from silicon show that the hypothetical native SiO₂ layer at the Si-Al sub 2, O sub 3, interface either is nonexistent or has no appreciable effect on injection properties. Studies of field and temperature dependence provide evidence that the electron injection occurs by trap-assisted tunneling.

AUTH: POWELL R.J. ; HUGHES G.W.

CLSS: U

CONN: N 00014 74 C 0185

CORP: RCA LABS. (PRINCETON, NJ)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: CHARGE INJECTION AND TRAPPING IN AL₂O₃ GATE INSULATORS (U), 7 P., (U)

.block

IEEE74-179

.endblock

.block

copy: 1 id: 82828-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-186

ABS: This paper reports on the results of an investigation of the interaction of a nuclear environment with a metal-gate, silicon-nitride, silicon dioxide, silicon-on-sapphire memory device. The test device was a 63-bit (7 words by 9 bits) three-terminal device. The tests were as follows: (1) transient photocurrent, (2) transient annealing, (3) total dose, (4) survivability, and (5) neutron tests. Facilities at AFCRL were used in the first four tests and at the Aberdeen Pulse Reactor for the last test. Samples were irradiated under power. Both interrogated and passive words

containing '1' and '0' states were investigated. Transient photocurrent and annealing data were obtained with the Linac operating in the electron mode. Electron energy was 10 MeV and pulse widths of 20 nanoseconds and 4.5 microseconds were used. Total dose data was obtained with a cobalt-60 source as well as the reactor.

ABS: A Flash X-ray generator operating in the electron mode (20-nanosecond pulse) was used to determine survivability rates.

AUTH: BRUCKER G.J.

CLSS: U

CONN: F 33615 72 C 1689

CORP: RCA ASTRO ELECTRONICS DIV. (PRINCETON, NJ)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: INTERACTION ON NUCLEAR ENVIRONMENT WITH MNOS MEMORY DEVICE (U), 7 P., (U)

.block

IEEE74-186

.endblock

.block

copy: 1 id: 82829-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-193

AUTH: KILLIANY J.M. ; BAKER W.D. ; SAKS N.S. ; BARBE D.F.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7412

DESC: SIMULATION (CO 60) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21, NO. 6

TITL: EFFECTS OF IONIZING RADIATION ON CHARGE-COUPLED DEVICE STRUCTURES (U), 8 P., (U)

TREE: 320

.block

IEEE74-193

.endblock

.block

copy: 1 id: 54402-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-193

ABS: The effects of ionizing radiation on four different charge-coupled device structures have been investigated. Both shift registers and optical imaging devices have been considered. The electrical and imaging (where appropriate) performance of the devices were evaluated as a function of total gamma ray dose. The principal

failure mechanisms have been identified for each particular device structure. Some conclusions about the relative radiation tolerance of the various device designs are drawn.

AUTH: KILLIANY J.M. ; BAKER W.D. ; SAKS N.S. ; BARBE D.F.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECTS OF IONIZING RADIATION ON CHARGE-COUPLED DEVICE STRUCTURES
(U), 8 P., (U)

.block

IEEE74-193

.endblock

.block

copy: 1 id: 82830-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-201
AUTH: BRUCKER G.J.
CLSS: U
CONN: F 33615 72 C 1679
CORP: RCA ASTRO ELECTRONICS DIV. (PRINCETON, NJ)
DATE: 7412
DESC: SIMULATION (PULSED REACTOR FLASH X-RAY CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
SUJO: 3-212-000 ; 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TITL: TRANSIENT AND STEADY-STATE RADIATION RESPONSE OF CMOS/SOS DEVICES
(U), 7 P., (U)
TREE: 325

.block

IEEE74-201

.endblock

.block

copy: 1 id: 54403-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-201
ABS: In an investigation to characterize the radiation properties of a pilot produce capability for manufacture of MNOS memory arrays, a CMOS test vehicle proposed as the building block for the array electronics was tested in a nuclear environment. The test device was a CD4007 configuration fabricated with an unhardened SiO2 gate insulator on a sapphire substrate. Test devices were made with aluminum and silicon gates, and test samples were selected to satisfy the requirement of operating satisfactorily with a source-drain voltage less than or equal to 21.5 volts. The tests

were as follows: (1) transient photo-current, (2) transient annealing, (3) total dose, (4) survivability, and (5) neutrons. Facilities at AFCRL were used for the first four and the Aberdeen Pulse Reactor for the last test. The tests were conducted in the order listed above on different batches of samples for each test.

AUTH: BRUCKER G.J.
CLSS: U
CORP: RCA ASTRO ELECTRONICS DIV. (PRINCETON, NJ)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: TRANSIENT AND STEADY-STATE RADIATION RESPONSE OF CMOS/SOS DEVICES
(U), 7 P., (U)

.block

IEEE74-201

.endblock

.block

copy: 1 id: 82831-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-208
AUTH: KJAR R.A. ; PEEL J.
CLSS: U
CORP: ROCKWELL INTERNATIONAL, ELECTRONICS RESEARCH DIV. (ANAHEIM, CA.)
DATE: 7412
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTOR
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TTTL: RADIATION INDUCED LEAKAGE CURRENT IN N-CHANNEL SOS TRANSISTORS (U),
3 P., (U)
TREE: 310

.block

IEEE74-208

.endblock

.block

copy: 1 id: 54404-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-208
ABS: High drain-leakage currents have been observed in n-channel SOS transistors after exposure to ionizing radiation. These currents could not be explained by the change in gate threshold voltage or by other radiation effects in the gate insulator. Two mechanisms were identified as being responsible for the radiation-induced leakage current. Charge trapping in the sapphire and the consequent formation of a channel at the silicon-sapphire interface is the

major cause of the leakage current. Under some conditions, a smaller component of leakage current can also result from charge trapping in the silicon dioxide at island edges.

AUTH: KJAR R.A. ; PEEL J.
CLSS: U
CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION INDUCED LEAKAGE CURRENT IN N-CHANNEL SOS TRANSISTORS (U),
3 P., (U)

.block

IEEE74-208

.endblock

.block

copy: 1 id: 82832-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-211
AUTH: NEAMEN D. ; SHEDD W. ; BUCHANAN B.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA.)
DATE: 7412
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TTTL: RADIATION INDUCED CHARGE TRAPPING AT THE SILICON SAPPHIRE SUBSTRATE
INTERFACE (U), 6 P., (U)
TREE: 200

.block

IEEE74-211

.endblock

.block

copy: 1 id: 54405-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-211
ABS: The radiation induced charge trapping at the silicon sapphire interface and its effect on MIS/SOS device performance has been experimentally determined for a total ionizing dose up to 10 super 8, rads (Si). These effects were determined by measuring the electrical characteristics of three types of device structures fabricated in SOS material: MIS devices with hardened and unhardened gate insulators, JFET's and diodes. The main emphasis is on the use of novel JFET structures for characterizing the SOS interface by modulating the gate depletion region against the sapphire substrate. Micrographs are also presented which show radiation induced changes

in the straining characteristics of angle lapped and stained sections of the SOS interface.

ABS: The experimental results indicate that positive charge is trapped in the sapphire substrate near the silicon-sapphire interface due to the total ionizing radiation. A model of the radiation induced charge trapping at the silicon sapphire interface is proposed.

AUTH: NEAMEN D. ; SHEDD W. ; BUCHANAN B.

CLSS: U

CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: RADIATION INDUCED CHARGE TRAPPING AT THE SILICON SAPPHIRE SUBSTRATE INTERFACE (U), 6 P., (U)

.block

IEEE74-211

.endblock

.block

copy: 1 id: 82833-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-217

ABS: The linear sapphire photoconductance approximation was used to model dose-rate effects in CMOS/SOS inverters. From this model, optimum values were derived for the ratio of n-channel to p-channel transistor gate width, thereby maximizing the dose-rate failure threshold.

AUTH: PHILLIPS D.H.

CLSS: U

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: SILICON-ON-SAPPHIRE DEVICE PHOTOCONDUCTION PREDICTIONS (U), 4 P., (U)

.block

IEEE74-217

.endblock

.block

copy: 1 id: 82834-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-221

ABS: The model presented describes the transport of relativistic electrons through extended media in the presence of static external magnetic fields of arbitrary spatial orientation. The material geometry must be one-dimensional; however, since the model employs a full three-dimensional description of electron and photon trajectories, one can easily obtain selected two-or three-dimensional outputs from symmetry-breaking source

distributions and field orientations. Model versatility is demonstrated through its application to three diverse areas of pulsed-electron-beam research.

AUTH: HALBLEIB J.A.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRON TRANSPORT IN THE PRESENCE OF UNIFORM MAGNETIC FIELDS (U), 6
P., (U)

.block

IEEE74-221

.endblock

.block

copy: 1 id: 82835-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-227

ABS: Analytical formulae are presented for the electron number current, energy current and energy deposition at the photon irradiated interface between different materials. Representative results are shown and compared with previous experimental data. Experimental results are given for the electron number current as a function of interface materials, photon spectrum and photon angle of incidence. The experimental results are compared to the predictions of the analytical formulae and the Monte Carlo code SANDYL.

AUTH: DELLIN T.A. ; DOLAN K.W. ; MACCALLUM C.J.
CLSS: U
CORP: SANDIA LABS. (LIVERMORE, CA) ; SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: PHOTO COMPTON CURRENTS AT MATERIAL INTERFACES: THEORY AND EXPERIMENT
(U), 8 P., (U)

.block

IEEE74-227

.endblock

.block

copy: 1 id: 82836-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-235

ABS: When a dielectric material is exposed to x-or gamma-radiation, charge buildup occurs in regions of the dielectric near interfaces with dissimilar media. The charge buildup results from the divergence of photo-Compton current near the interface. The charge density acts as a source for an electric field. If one assumes a transient dielectric conductivity equal to the bulk radiation-induced conductivity of the dielectric, one can predict a

sufficiently large x-ray generated space-charge field at high exposures to either limit the photo-Compton current--hence perturb the depth-dose profile in the dielectric--or initiate dielectric breakdown. There also occurs at the interface, however, a gradient in dose which should produce a gradient in transient conductivity. This conductivity gradient, it is shown, profoundly modifies the charge buildup and space-charge field in the dielectric.

ABS: Calculations of current density, charge density, and space-charge field are presented for a planar gold/polyethylene interface irradiated by 30, 100, 200, and 1000 keV x-rays. It is found that for the lower x-ray energies the saturation space-charge field is too low to significantly perturb the depth-dose profile or initiate breakdown, but for the 1000 keV x-rays the saturation space-charge field may be sufficiently high to significantly perturb the depth-dose profile. In all cases, the charge density profile is strongly perturbed by the conduction currents, even for relatively low exposures.

AUTH: CHADSEY W.L.

CLSS: U

CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: X-RAY PRODUCED CHARGE DEPOSITION AND DOSE IN DIELECTRICS NEAR INTERFACES INCLUDING SPACE-CHARGE FIELD AND CONDUCTIVITY EFFECTS (U), 8 P., (U)

.block

IEEE74-235

.endblock

.block

copy: 1 id: 82837-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-243

ABS: Irradiation of an insulator by gamma rays can produce voltage and charge buildups near thin layers of foreign material within the insulator. Measurements have been made of the current produced as a function of atomic number and thickness of the perturbing layer. Current was also measured as a function of separation from the perturbation, as was voltage buildup within the insulator close to the perturbation.

AUTH: KRONENBERG S. ; LUX R. ; NILSON K. ; JURCZYK G. ; PFEFFER R. ; BERKOWITZ H.

CLSS: U

CORP: ARMY ELECTRONICS COMMAND (FT. MONMOUTH, NJ)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: GAMMA RAY INDUCED CHARGE BUILDUP IN INSULATORS (U), 6 P., (U)

.block

IEEE74-243

.endblock

.block

copy: 1 id: 82838-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-249

ABS: Charge transport within cavities is a complicated phenomena, depending on injected beam parameters, pressure and the geometry of the cavity. If there are complex distributions of conductors and/or dielectrics within the structure, an understanding of how these can affect propagation is fundamental to categorizing IEMP phenomenology. In this paper we present the results of an experimental program which demonstrates that dielectric surfaces can significantly enhance the transport of current through evacuated cavities. The gas pressures involved are well below those necessary for space charge neutralization.

AUTH: LITTLE R.G. ; LOWELL R. ; UGLUM J.R.

CLSS: U

CORP: SIMULATION PHYSICS, INC. (BURLINGTON, MA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: CAVITY CURRENT ENHANCEMENT BY DIELECTRICS (U), 4 P., (U)

.block

IEEE74-249

.endblock

.block

copy: 1 id: 82839-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-253

ABS: In this paper is described an experiment to examine low energy electron beam transport (beta about 0.33) in a low impedance (one ohm) diode structure. Both charge and current neutralization as a function of pressure from 1 mTorr to 2 Torr were determined for the first time with an electron beam facility modified to permit rise times of 2 ns and pulse widths of 5 ns with a peak intensity of 25 A/cm squared. The results of the experiment indicate that for electron beams with this short time duration, charge neutralization will occur for pressures in the range 200-300 mTorr. Furthermore, Langmuir oscillations were observed in the 200 to 300 mTorr pressure regime and late-time plasma 'tails', explained in terms of the magnetic diffusion time, were observed for pressures more than or equal to 400 mTorr. Current neutralization of the beam was observed at 900 mTorr.

ABS: Qualitative agreement is obtained between theory and experiment.

AUTH: GENUARIO R. ; BROMBORSKY A.

CLSS: U

CORP: HARRY DIAMOND LABS. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL

CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: CHARGE AND CURRENT NEUTRALIZATION PHENOMENA IN LOW-IMPEDANCE DIODE
STRUCTURES (U), 6 P., (U)

.block

IEEE74-253

.endblock

.block

copy: 1 id: 82840-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-259

ABS: A fully dynamic, self-consistent computer code has been developed to solve internal electromagnetic pulse (IEMP) problems in cylindrical geometries excited by a pulse of ionizing radiation. Comparisons between the fully dynamic and previous quasi-static solutions are made, and the range of validity of the quasi-static approximation is defined. Results show that non-linear effects arising from field-perturbed electron motion significantly affect the range of validity of the quasi-static approximation.

AUTH: WENAAS E.P. ; WOODS A.J.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA) ; IRT (SAN DIEGO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: COMPARISONS OF QUASI-STATIC AND FULLY DYNAMIC SOLUTIONS FOR
ELECTROMAGNETIC FIELD CALCULATIONS IN A CYLINDRICAL CAVITY (U), 5
P., (U)

.block

IEEE74-259

.endblock

.block

copy: 1 id: 82841-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-264

ABS: The particle method of numerical plasma simulation is applied to the calculation of surface currents on a metallic cylinder in air, exposed to an axially directed planar wavefront of gamma radiation. Assuming a collision-dominated plasma, the Compton electron trajectories, rate equations for the production of secondary electrons and the Maxwell equations are advanced self-consistently for each time step at all mesh cells in the finite difference solution. Numerical results presented include comparisons of self-consistent skin currents with results obtained by prescribing (no field reaction) the Compton current density and ionization rate proportional to the gamma flux.

ABS: With a sin squared pulsed of 40 ns duration and a relative air density of .1, the self-consistent surface current magnitudes lie considerably below prescribed source results for peak gamma dose

rates more or about 10 super 11, Rad/sec. At 10 super 9, Rad/sec, the skin currents from the particle calculations are nearly identical with currents resulting from a prescribed source obtained from the electron dynamics in the absence of the Lorentz force.

AUTH: HILL J.R. ; WILSON M.R.

CLSS: U

CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: NONLINEAR SELF-CONSISTENT CALCULATIONS OF RADIATION INDUCED CYLINDER
SKIN CURRENTS (U), 7 P., (U)

.block

IEEE74-264

.endblock

.block

copy: 1 id: 82842-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-271

ABS: A technique utilizing a lumped-element approach has been developed for modeling the SGEMP response of a satellite-like structure. The space outside the structure is modeled by a number of current generators representing the real current produced by emitted electron charge, and capacitors are used to model the displacement current. Numerical solutions are obtained for a single electron moving away from a sphere, and compared with more exact solutions utilizing the Maxwell equations directly.

AUTH: WENAAS E.P.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA) ; IRT (SAN DIEGO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: LUMPED-ELEMENT MODELING OF SATELLITE SGEMP EXCITATION (U), 5 P., (U)

.block

IEEE74-271

.endblock

.block

copy: 1 id: 82843-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-276

ABS: We report the results of a study of replacement currents generated in multiconductor and semirigid coaxial cables during irradiation by low (20-100 keV) photons. Short samples (about 5 cm) of each of thirteen cable types were exposed to filtered radiation from a plasma focus device and the induced center conductor currents were measured for vacuum and air environments. Vacuum responses could be correlated with the magnitude and location of small gaps between the

cable elements and the dielectric material, while air responses depended on prior irradiation history, cable geometry, and applied center conductor bias potentials. An analytic computer code has been developed to evaluate the radiation response of these complex cables for a vacuum. Cable air responses are qualitatively discussed in term of ionized gas kinetics.

AUTH: FITZWILSON R.L. ; BERNSTEIN M.J. ; ALSTON T.E.
CLSS: U
CORP: AEROSPACE CORP. (EL SEGUNDO, CA) ; TRW (REDONDO BEACH, CA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION INDUCED CURRENTS IN SHIELDED MULTI-CONDUCTOR AND SEMIRIGID
CABLES (U), 8 P., (U)

.block

IEEE74-276

.endblock

.block

copy: 1 id: 82844-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-284

ABS: Three typical operational amplifiers were irradiated by a plasma focus to study their IEMP responses with and without superposition of TREE responses. The 30-kJ plasma focus device produced photons primarily in the 8-100 keV range with pulse widths typically in the range of 10-15 nsec. Pulses of electrons were also deposited on the external leads of the op amps to determine the characteristic responses. These units were operated in circuits with closed-loop gains ranging from 5 to 100. During direct irradiation of the op amps, it was found that the IEMP responses (caused by photoemission within the housings) dominated the TREE responses provided that the RC time for the deposited charge to drain to ground was longer than a characteristic op amp response time. The gas normally contained inside hermetically-sealed op amp units enhanced their IEMP responses.

ABS: For most op amps, charge deposited on the input leads dominated the response, but some types were also sensitive to charge deposited on other external leads such as those controlling the offset.

AUTH: BERNSTEIN M.J. ; PASCHEN K.W.
CLSS: U
CORP: AEROSPACE CORP. (EL SEGUNDO, CA)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: STUDY OF IEMP EFFECTS ON IC OPERATIONAL AMPLIFIER CIRCUITS (U), 7
P., (U)

.block

IEEE74-284

.endblock

.block

copy: 1 id: 82845-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-291

ABS: An analytical method is described for calculating replacement currents in structures irradiated by x-ray photons, and the method is applied to the case of a structure consisting of plane parallel layers. The analysis consists of a computer-aided computation of photocurrent emission from the material layers; the photocurrents are then used as current generators in an equivalent circuit model, in which transient conductivity in air and dielectric layers is also incorporated. It is shown in particular that the presence of vacuum or air-filled void regions can have a large effect on the magnitude of the replacement currents. Calculated results are compared with experimental measurements for two specific test samples.

AUTH: SINGLETARY L.D. ; NIELSEN L.C. ; CLEMENT D.M. ; WULLER C.E. JR. ;
FITZWILSON R.L.

CLSS: U

CORP: TRW (REDONDO BEACH, CA) ; AEROSPACE CORP. (EL SEGUNDO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: REPLACEMENT CURRENTS IN IRRADIATED MULTILAYER STRUCTURES (U), 4 P.,
(U)

.block

IEEE74-291

.endblock

.block

copy: 1 id: 82846-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-295

AUTH: FITZWILSON R.L. ; COMISAR G.G.

CLSS: U

CORP: AEROSPACE CORP. (EL SEGUNDO, CA.)

DATE: 7412

DESC: Nuclear Weapon Effects electronic subsystems computers memory L1

DESC: SIMULATION (PLASMA FOCUS DEVICE) ; EXPERIMENTAL

EFFT: IEMP

SUJO: 3-212-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6

TITL: RADIATION INDUCED REPLACEMENT CURRENTS IN A PLATED WIRE MEMORY (U),
7 P., (U)

TREE: 343

.block

IEEE74-295

.endblock

.block

copy: 1 id: 54409-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-295

ABS: We report the results of a study of the replacement currents generated in elements of a conventional plated-wire memory during irradiation by low energy (20-100 keV) photons. Measurements are analytically discussed in terms of IEMP induced-charge calculations and, for an air environment, ionized gas kinetics. It is experimentally demonstrated that the peak induced digit wire currents (per unit flux) can be reduced by at least a factor of 10 when the memory tunnel structure is filled with a dielectric oil.

AUTH: FITZWILSON R.L. ; COMISAR G.G.

CLSS: U

CORP: AEROSPACE CORP. (EL SEGUNDO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RADIATION INDUCED REPLACEMENT CURRENTS IN A PLATED WIRE MEMORY (U), 7 P., (U)

.block

IEEE74-295

.endblock

.block

copy: 1 id: 82847-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-302

ABS: Photo-emission currents and their associated electromagnetic fields are generated when photons irradiate any system. When gas-filled cavities are irradiated, photo-ionization and collisional ionization of the gas can produce a background plasma which significantly alters the electromagnetic response within the cavity. Previous

AUTH: DEPLOMB E.P. ; FITZWILSON R. ; BEEMER P.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA) ; IRT (SAN DIEGO, CA) ; AEROSPACE CORP. (EL SEGUNDO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: ANALYTICAL MODELING AND EXPERIMENTAL TESTING OF PRESSURE EFFECTS IN SMALL CAVITIES COUPLED TO CIRCUITRY (U), 6 P., (U)

.block

IEEE74-302

.endblock

.block

copy: 1 id: 82848-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-308

AUTH: RAYMOND J.P.
CLSS: U
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA.)
DATE: 7412
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6

TTTL: MSI/LSI RADIATION RESPONSE, CHARACTERIZATION AND TESTING (U), 7 P.,
(U)

TREE: 320

.block

IEEE74-308

.endblock

.block

copy: 1 id: 54410-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-308

ABS: Results are presented on the permanent damage and transient photoresponse of complex monolithic MSI/LSI arrays representing a variety of both bipolar and MOS technologies. Unique aspects of MSI/LSI vulnerability are principally in the nature of the basic logic cells and the complexities of overall array performance evaluation. Considerations illustrated in permanent damage evaluation are complete performance evaluation, electrical bias conditions during radiation exposure, selection of sample sizes, and electrical pulse overstress effects. Considerations illustrated in the transient photoresponse are the dependence on ionizing radiation pulse-width, determination of worst-case logic operating conditions, and power-supply photocurrent. Analytical techniques are suggested as an essential aid in MSI/LSI characterization and testing.

AUTH: RAYMOND J.P.

CLSS: U

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: MSI/LSI RADIATION RESPONSE, CHARACTERIZATION AND TESTING (U), 7 P.,
(U)

.block

IEEE74-308

.endblock

.block

copy: 1 id: 82849-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-315

AUTH: FOSSUM J.G. ; SANDER H.H. ; GERWIN H.J.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7412
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TITL: EFFECTS OF IONIZING RADIATION ON DIFFUSED RESISTORS (U), 8 P., (U)
TREE: 320

.block

IEEE74-315

.endblock

.block

copy: 1 id: 54411-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-315

ABS: A theoretical examination of the effects of ionizing radiation on diffused resistors performed to ascertain the feasibility of their use in hardened dielectrically isolated integrated circuits is described. The two basic effects--conductivity modulation, which is generally insignificant or can easily be rendered so, and photocurrent generation, the consequences of which essentially determine the diffused resistor hardness--are studied. Results indicate that typical dielectrically isolated diffused resistors are quite invulnerable to ionizing radiation. Design guidelines to achieve optimum hardness are implied. Initial findings of radiation experiments performed on a diffused resistor test chip are report. When transient leakage dissociated with the resistor structures is accounted for, the results substantiate the primary conclusions of the theoretical study.

AUTH: FOXXUM J.G. ; SANDER H.H. ; GERWIN H.J.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECTS OF IONIZING RADIATION ON DIFFUSED RESISTORS (U), 8 P., (U)

.block

IEEE74-315

.endblock

.block

copy: 1 id: 82850-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-323

ABS: The response of Integrated Circuits (IC) to pulsed and gated

sine-wave stimuli can be used to develop reasonably accurate device models for EMP assessment. These IC models can then be used in conjunction with circuit and transfer function models to determine the failure threshold (upset and burnout) to postulated EMP disturbance. This paper describes the model development and test verification of IC models representing the following technologies: (1) Junction Isolated Devices: Eight TTL devices including gates, comparators, inverters and Flip-Flops. (2) Dielectrically Isolated Devices: Nine DTL and two TTL devices including gates, input and output networks, level detectors and Flip-Flops. All devices were modeled and tested for upset over a frequency range from 10 kHz to 50 MHz.

ABS: Input voltage amplitudes ranged from 0.5 to 50 volts with source impedances tailored to device configurations resulting from EMP systems analysis. For upset, correspondence between model prediction and test verification was observed to be within plus or minus 3 db (referenced to the test level) from 10 kHz through 20 MHz. The results of this effort indicate that: (1) Modeling of integrated circuits for EMP is feasible using manufacturer's suggested schematics and supplemental test data. (2) Permanent damage parameters can be added to the model for specified ports of entry and by use of permanent damage test data. The methods, and to some extent, the data presented can probably be applied to a larger class of device-types.

AUTH: KLEINER C. ; NELSON J. ; VASSALLO F. ; HEATON E.

CLSS: U

CORP: ROCKWELL INTERNATIONAL (ANAHEIM, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: INTEGRATED CIRCUIT MODEL DEVELOPMENT FOR EMP (U), 9 P., (U)

.block

IEEE74-323

.endblock

.block

copy: 1 id: 82851-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-332

ABS: This paper shows how CMOS integrated circuits can be protected against electrical transients originating from nuclear explosions, static discharge, etc. First, the causes of transient failures are determined and then analyzed. Next, a wide range of protection devices are designed and evaluated. Finally, complete transient hardened logic gates are fabricated and tested to prove the feasibility of EMP hardened CMOS circuits.

AUTH: STEWART R.G. ; HAMPEL D.

CLSS: U

CORP: RCA (SOMERVILLE, NJ)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EMP HARDENED CMOS CIRCUITS (U), 7 P., (U)

.block

IEEE74-332

.endblock

.block

copy: 1 id: 82852-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-340

ABS: Results are presented on the application of previously developed simplified microcircuit modeling techniques to the analysis of an existing military subsystem in order to identify problem areas and demonstrate the state of the art. The D/A converter subsystem studied is part of the flight instrumentation used in the E4A (military version of 747) aircraft. It contains both digital and analog microcircuits, monolithic and hybrid, as well as discrete bipolar transistors and passive elements. The overall problem approach was that of an engineering vulnerability analysis on the subsystem. The individual components were experimentally characterized and modeled, and the component models were then interconnected to obtain a simulation of the entire D/A converter using an expanded version of the MINI-SCEPTRE computer code.

ABS: Comparison of computer predictions and experimental data demonstrates reasonably good agreement to within the repeatability of component samples. The major problem is the long computer run time and associated cost for a single photoresponse prediction.

AUTH: POCOCK D.N.

CLSS: U

CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: COMPUTER AIDED VULNERABILITY ANALYSIS OF A DIGITAL-TO-ANALOG CONVERTER (U), 8 P., (U)

.block

IEEE74-340

.endblock

.block

copy: 1 id: 82853-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-348

ABS: Dc to dc converter circuits in an ionizing environment are vulnerable to two common failure modes: overcurrent and second breakdown. This paper presents a study of these failure modes using a combination of laboratory tests, computer simulations, and super flash X-ray (SFXR) tests. Special techniques were used to measure a single load line transition in an actual SFXR environment and to predict these critical operating conditions using a widely distributed circuit analysis computer code. The results of the

laboratory electrical tests, digital computer simulations, and SFXR tests were in good agreement, placing confidence in the ability to simulate, measure, and predict the failure modes associated with this type of dc to dc converter in an SFXR environment.

AUTH: TANKE J.M. ; CONN J.M. ; MONTE S.J.
CLSS: U
CORP: MARTIN MARIETTA AEROSPACE (ORLANDO, FL)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: MEASUREMENT AND PREDICTION TECHNIQUES FOR DC TO DC CONVERTER FAILURE
MODES (U), 5 P., (U)

.block

IEEE74-348

.endblock

.block

copy: 1 id: 82854-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-353
AUTH: MCEWAN J.R.
CLSS: U
CCDE: NICAP
CORP: BELL TELEPHONE LABS., INC. (MURRAY HILL, NJ)
DATE: 7412
DESC: SIMULATION (LINAC) ; THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS

EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE, DECEMBER 1974, VOLUME NS-21,
NO. 6
TTTL: COMPUTER SIMULATION OF RADIATION INDUCED EMITTER CROWDING (U), 6 P.,
(U)

TREE: 310 ; 200

.block

IEEE74-353

.endblock

.block

copy: 1 id: 54416-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-353
ABS: Radiation induced emitter crowding effects can precipitate an
anomalous photocurrent response. Such a response would not be
predicted by the usual computer simulation using a charge control
representation of a bipolar transistor equipped with a primary
photocurrent source. Radiation induced emitter crowding effects are
prevalent in large epitaxial power transistors which operate with
low impedance loads where large photocurrents are observed as a

result of irradiation. A model has been developed which simulates radiation induced emitter crowding and it is applicable to most existing circuit analysis codes. Experimental data obtained from pulsing 50 watt silicon epitaxial power transistors with 50 nanosecond and 8 microsecond linear accelerator pulses in the electron beam mode show excellent

AUTH: MCEWAN J.R.
CLSS: U
CORP: BELL TELEPHONE LABS. (MURRAY HILL, NJ)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: COMPUTER SIMULATION OF RADIATION INDUCED EMITTER CROWDING (U), 6 P.,
(U)

.block

IEEE74-353

.endblock

.block

copy: 1 id: 82855-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-359

ABS: An improved technique has been developed for the measurement of electron energy deposition versus depth profiles using thin foil calorimeters. A square-wave modulated beam is employed, and the time derivative of the thermocouple signal is measured at a specified time after beam switch. The method and apparatus are described, and results are presented for Al and Ta for 0.3, 0.5, and 1.0 MeV normally incident electrons. Data are also presented for the same energies and 60 degrees (relative to normal) incidence in Al. Deposition data in a layered Ta and Al system at 1.0 and 0.5 MeV energy (normal incidence) are also presented.

AUTH: MILLER G.H. ; LOCKWOOD G.J. ; HALBLEIB J.A.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7400
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: IMPROVED CALORIMETRIC METHOD FOR ENERGY DEPOSITION MEASUREMENT (U),
7 P., (U)

.block

IEEE74-359

.endblock

.block

copy: 1 id: 82856-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-366

ABS: The unusually complex thermoluminescence obtained from Harshaw dosimeter type TLD-100 LiF crystals has been studied with apparatus

for measuring emission intensity simultaneously as a function of both wave-length and sample temperature. A separate signal averaged spectrum is obtained at 5.5 C temperature intervals. Data reduction includes all corrections needed to obtain curves at absolute intensity vs photon energy. Numerous results were obtained from crystals exposed to Co-60 gamma-ray doses extending from 5x10 squared to 5x10 super 7, R. All emission spectra could be resolved into Gaussian shaped bands using a computerized best-fit procedure. Below 10 super 5, R all spectra contain three bands at roughly 3.01, 2.90 and 2.71 eV with full widths of 0.90, 0.72, and 0.96 eV; the precise values vary slightly with temperature.

ABS: Above 10 super 5, R additional bands appear at 2.98 and 2.50 eV, and with increasing exposure the 2.90 and 2.71 eV bands diminish in intensity. At doses greater than 4 or 5 x 10 super 6, R additional bands appear at 4.0, 2.3, and 1.5 eV. In the range usually used for dosimetry,, at least the 3 bands at 3.01, 2.90, and 2.71 eV contribute to the thermoluminescence. Glow curves for each of these emission bands were constructed from the resolved Gaussian shaped bands. They contain 8, 3, and 5 prominent peaks. The contrast, glow curves for unresolved spectra contain at least 8 glow peaks, and each peak can contain undetermined contributions from 1, 2, or 3 emission centers. All glow peaks analyzed to date can be fitted by the first-order expression dn/dt equals $-ns \exp (-E/kT)$.

ABS: However, the E and s values obtained from the 190 C peak and perhaps some of the other high temperature peaks are too large to be meaningful; thus the kinetics for this peak, and possibly other high temperature peaks, must be complex. To date, thirteen glow peaks have been identified. At low doses the emission is confined to the low temperature glow peaks. With increasing dose the emission intensity increases and progressively shifts to higher temperature peaks. The maximum intensity occurs at 10 super 6, R. At higher doses the emission is reduced but occurs among the highest temperature peaks.

AUTH: FAIRCHILD R.G. ; MATTERN P.L. ; LENGWEILER K. ; LEVY P.W.

CLSS: U

CORP: BROOKHAVEN NATIONAL LAB. (UPTON, NY)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: THERMOLUMINESCENCE OF LIF TLD-100 DOSIMETER CRYSTALS (U), 7 P., (U)

.block

IEEE74-366

.endblock

.block

copy: 1 id: 82857-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-373

ABS: Two high-resolution charged particle spectrometers employing silicon surface-barrier detectors have been operated in an 800 km altitude polar orbit for a 26-month period between October 1971 and December 1973. Based on existing trapped radiation models and the measured

solar flare environment during this period the detectors were exposed to a proton fluence of 2.8×10^{13} protons/cm squared at energies > 400 keV and an electron fluence of 4.5×10^{13} electrons/cm squared at energies > 50 keV. High-resolution pulse height spectra of the alpha particles from low-intensity Americium-241 in-flight calibration sources show that the resolutions of the detectors did not degrade more than 5 percent and that the gains of the system did not vary more than 1.2 percent as a result of this exposure. Two aspects of detector operation are considered responsible for this performance.

ABS: First, the incident detectors were operated with the rear, aluminum contact exposed to the radiation environment instead of the front, gold contact. The more intense lower energy radiation is therefore stopped in the rear ohmic contact region instead of in the front surface-barrier junction region and the overall damage effects are significantly reduced. Second, a detector bias technique was employed that automatically maintained a constant depletion potential across the detector independent of variations in leakage current due to radiation damage.

AUTH: REAGAN J.B. ; MATTHEWS J.D. ; KILNER J.R. ; BAKKE J.C. ; IMHOF W.L.

CLSS: U

CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: HIGH RESOLUTION MEASUREMENTS OF SPACE RADIATION EFFECTS ON SILICON SURFACE-BARRIER DETECTORS (U), 5 P., (U)

.block

IEEE74-373

.endblock

.block

copy: 1 id: 82858-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-378

AUTH: FLANAGAN T.M. ; LEADON R.E. ; COLWELL J.F. ; BERGER R.A.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA) ; IRT (SAN DIEGO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: STORED CHARGE IN TANTALUM CAPACITORS: LATENT AND MANIFEST MAVERICKS (U), 5 P., (U)

.block

IEEE74-378

.endblock

.block

copy: 1 id: 82859-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-383

ABS: A method of screening bipolar transistors for total dose surface effects using a scanning electron microscope (SEM) is described. This screening technique is implemented by irradiation of a selected pattern of dice on each wafer. The electron-induced damage from the SEM is shown to correlate with equivalent total dose irradiations from a Co-60 source. It is also shown that the degradation of the selected dice is characteristic of the remaining dice on the wafer.

AUTH: LIPMAN J.A. ; BRUNCKE W.C. ; CROSTHWAIT D.L. ; GALLOWAY K.F. ; PEASE R.L.

CLSS: U

CORP: TEXAS INSTRUMENTS, INC. (DALLAS, TX) ; NAVAL AMMUNITION DEPOT (CRANE, IN)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: USE OF A SCANNING ELECTRON MICROSCOPE FOR SCREENING BIPOLAR SURFACE EFFECTS (U), 4 P., (U)

.block

IEEE74-383

.endblock

.block

copy: 1 id: 82860-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE74-387

ABS: Low-energy electron irradiation of complementary metal-oxide semiconductor (CMOS) devices has been correlated to cobalt-60 gamma irradiation in terms of oxide space charges and interface states. This paper reports on the results obtained using the low-energy electron beam of a standard commercial scanning-electron-microscope (SEM) for in-process hardness assurance screening and as a tool for rapid evaluation of process variations designed to improve total-dose radiation hardness. The techniques for SEM testing are described, and the results of correlation studies of radiation effects produced by the SEM, gamma radiation (Co-60), and 10 super 6-eV sources compared. The variance in total dose radiation hardness over a single wafer and from wafer to wafer has been investigated for the CMOS CD-4007 array and the results are reported.

AUTH: COHEN S. ; HUGHES H.

CLSS: U

CORP: RCA SOLID STATE TECHNOLOGY CENTER (SOMERVILLE, NJ) ; NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: SEM IRRADIATION FOR HARDNESS ASSURANCE SCREENING AND PROCESS DEFINITION (U), 3 P., (U)

.block

IEEE74-387

.endblock

.block

copy: 1 id: 82861-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-390

ABS: Methods are discussed for hardness assurance qualification screens for quartz crystal resonant devices. Verifying that the quartz bar has been properly swept and ensuring device traceability to that bar may be adequate for filter applications and some oscillators. For precision resonators, the radiation testing of each resonator is the only known way to be certain that a defective resonator was not obtained. Recommendations for particular tests are given.

AUTH: FLANAGAN T.M.

CLSS: U

CORP: INTELCOM RAD TECH (SAN DIEGO, CA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: HARDNESS ASSURANCE IN QUARTZ CRYSTAL RESONATORS (U), 3 P., (U)

.block

IEEE74-390

.endblock

.block

copy: 1 id: 82862-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-393

ABS: Correlation and screening techniques for neutron degradation of TTL integrated circuits have been examined at three different levels: measurements restricted to normal electrical leads,, measurements using special internal leads, and measurements with a special chip level breakout transistor. The results of this study show much higher prediction accuracies for neutron degradation when the special lead or breakout transistor measurements are used. The special lead approach can be implemented with DC measurements, and it is feasible to make these measurements at the wafer probe level to eliminate the necessity of changing the pinout on the packaged device. These special leads can be added to radiation-hardened circuits to optimize their application to high reliability systems.

AUTH: JOHNSTON A.H. ; SKAVLAND R.L.

CLSS: U

CORP: BOEING AEROSPACE CO. (SEATTLE, WA)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: NEUTRON HARDNESS ASSURANCE TECHNIQUES FOR TTL INTEGRATED CIRCUITS (U), 6 P., (U)

.block

IEEE74-393

.endblock

.block

copy: 1 id: 82863-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-399

ABS: The single photoelectron response of several fast phototubes (RTC 56 DUVF, PM 2106, XP 1021, XP 1210 and RCA 8850, C 31024) has been measured using a sampling technique in conjunction with short light pulses and a fast oscilloscope.

AUTH: BROLL N. ; SIPP B. ; MIEHE J.A.

CLSS: U

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: SINGLE ELECTRON RESPONSE OF FAST PHOTOMULTIPLIERS (U), 4 P., (U)

.block

IEEE74-399

.endblock

.block

copy: 1 id: 82864-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE74-403

ABS: A spark chamber track finding program has been written. The accuracy of the location of the track is good, and if the chamber contains many spurious sparks the computation time is much less than the time used by a least squares fit routine. Multiple tracks can be found and interaction vertices can thereby be determined.

AUTH: ARENS J.F.

CLSS: U

CORP: GODDARD SPACE FLIGHT CENTER (GREENBELT, MD)

DATE: 7400

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-21 NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: SPARK CHAMBER TRACK FINDING PROGRAM (U), 6 P., (U)

.block

IEEE74-403

.endblock

.block

copy: 1 id: 82865-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75

CLSS: U

CORP: INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (NEW YORK, NY)

DATE: 7512

REPN: NS 22 NO. 6

TITL: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS(U), 576 P., (U)

.block

IEEE75

.endblock

.block

copy: 1 id: 82866-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2144

AUTH: JOHNSON W.C.

CLSS: U

CORP: PRINCETON UNIVERSITY (PRINCETON, NJ)

DATE: 7512

DESC: SIMULATION (E BEAM) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: MECHANISMS OF CHARGE BUILDUP IN MOS INSULATORS (U), 7 P., (U)

TREE: 200

.block

IEEE75-2144

.endblock

.block

copy: 1 id: 82867-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2151

AUTH: DERBENWICK G.F. ; GREGORY B.L.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7512

DESC: SIMULATION (CO 60) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: PROCESS OPTIMIZATION OF RADIATION-HARDENED CMOS INTEGRATED CIRCUITS
(U), 6 P.,(U)

TREE: 430

.block

IEEE75-2151

.endblock

.block

copy: 1 id: 82868-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2157
AUTH: SANDER H.H. ; GREGORY B.L.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
LOW TEMPERATURE
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: UNIFIED MODEL OF DAMAGE ANNEALING IN CMOS, FROM FREEZE-IN TO
TRANSIENT ANNEALING (U), 6 P., (U)
TREE: 200 ; 325

.block

IEEE75-2157

.endblock

.block

copy: 1 id: 82869-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2163
AUTH: BOESCH H.E. ; MCLEAN F.B. ; MCGARRITY J.M. ; AUSMAN G.A.JR.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7512
DESC: SIMULATION (LINAC)
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MOS CAPACITORS
EFFT: TREE
SUJO: 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: HOLE TRANSPORT AND CHARGE RELAXATION IN IRRADIATED IN SI02 MOS
CAPACITORS (U),5 P., (U)
TREE: 200 ; 325

.block

IEEE75-2163

.endblock

.block

copy: 1 id: 82870-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2168
AUTH: WANG S.T. ; ROYCE B.S.H. ; RUSSELL T.J.
CLSS: U
CORP: PRINCETON UNIVERSITY (PRINCETON, NJ)
DATE: 7512

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L5
CCD
DESC: SIMULATION (X-RAY MACHINE) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MOS CAPACITORS
EFFT: TREE
SUJO: 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: EFFECT OF ION IMPLANTATION ON OXIDE CHARGE STORAGE IN MOS DEVICES
(U), 4 P., (U)
TREE: 430

.block

IEEE75-2168

.endblock

.block

copy: 1 id: 82871-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2174
AUTH: CURTIS O.L. JR. ; SROUR J.R. ; CHIU K.Y.
CLSS: U
CONN: DAAG 39 73 C 0171
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7512
DESC: SIMULATION (E BEAM) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MOS CAPACITORS
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: PHYSICAL MECHANISMS OF RADIATION HARDENING OF MOS DEVICES BY ION
IMPLANTATION (U), 7 P., (U)
TREE: 430 ; 325

.block

IEEE75-2174

.endblock

.block

copy: 1 id: 82872-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2181
AUTH: AUBUCHON K.G. ; HARARI E.
CLSS: U
CONN: N 00014 72 C 0424
CORP: HUGHES AIRCRAFT CO. (NEWPORT BEACH, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: SIMULATION ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION HARDENED CMOS/SOS (U), 4 P., (U)
TREE: 430

.block

IEEE75-2181

.endblock

.block

copy: 1 id: 82873-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2185
AUTH: PEEL J.L. ; PANCHOLY R.K. ; KUHLMANN G.J. ; OKI T.J. ; WILLIAMS R.A.
CLSS: U
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)
DATE: 7512
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

EFFT: TREE

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: INVESTIGATION OF RADIATION EFFECTS AND HARDENING PROCEDURES FOR
CMOS/SOS (U), 5 P., (U)

TREE: 430

.block

IEEE75-2185

.endblock

.block

copy: 1 id: 82874-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2190
AUTH: PHILLIPS D.H.
CLSS: U
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)
DATE: 7512
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TTTL: RADIATION HARDENING OF MOS INTEGRATED CIRCUITS ON 111 SILICON (U), 3
P., (U)

TREE: 430

.block

IEEE75-2190

.endblock

.block

copy: 1 id: 82875-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2193

AUTH: KJAR R.A. ; NICHOLS D.K.

CLSS: U

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7512

DESC: SIMULATION (E BEAM) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 MOS CAPACITOR

EFFT: TREE

SUJO: 3-222-000 ; 3-229-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RADIATION-INDUCED SURFACE STATES IN MOS DEVICES (U), 4 P., (U)

TREE: 430 ; 325

.block

IEEE75-2193

.endblock

.block

copy: 1 id: 82876-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2197

AUTH: NEAMEN D. ; BUCHANAN B. ; SHEDD W.

CLSS: U

CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA)

DATE: 7512

DESC: SIMULATION ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
MISFET/SOS

EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: IONIZING RADIATION EFFECTS IN SOS STRUCTURES (U), 6 P., (U)

TREE: 320

.block

IEEE75-2197

.endblock

.block

copy: 1 id: 82877-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2203
AUTH: NEAMEN D. ; SHEDD W. ; BUCHANAN B.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA)
DATE: 7512
DESC: SIMULATION ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: THIN FILM SILICON ON SILICON NITRIDE FOR RADIATION HARDENED
DIELECTRICALLY ISOLATED MISFET'S (U), 5 P., (U)
TREE: 430

.block

IEEE75-2203

.endblock

.block

copy: 1 id: 82878-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2208
AUTH: FOSSUM J.G. ; DERBENWICK G.F. ; GREGORY B.L.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: DESIGN OPTIMIZATION OF RADIATION-HARDENED CMOS INTEGRATED CIRCUITS
(U), 6 P., (U)
TREE: 430 ; 325

.block

IEEE75-2208

.endblock

.block

copy: 1 id: 82879-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2214
AUTH: MAIER R.J. ; TALLON R.W.
CLSS: U
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes

silicon-controlled rectifiers L1 MOS TRANSISTORS

DESC: SIMULATION (CO 60 FLASH X-RAY) ; EXPERIMENTAL

EFFT: TREE

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: DOSE-RATE EFFECTS IN THE PERMANENT THRESHOLD VOLTAGE SHIFTS OF MOS
TRANSISTORS(U), 5 P., (U)

TREE: 325

.block

IEEE75-2214

.endblock

.block

copy: 1 id: 82880-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2227

AUTH: HUGHES R.C. ; EERNISSE E.P. ; STEIN H.J.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7512

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1

EFFT: TREE

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: HOLE TRANSPORT IN MOS OXIDES (U), 7 P., (U)

TREE: 200 ; 325

.block

IEEE75-2227

.endblock

.block

copy: 1 id: 82881-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2234

AUTH: MARQUARDT C.L. ; SIGEL G.H. JR.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7512

DESC: SIMULATION (CO 60) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1

EFFT: TREE

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RADIATION-INDUCED DEFECT CENTERS IN THERMALLY GROWN OXIDE FILMS (U),

6 P., (U)

TREE: 200

.block

IEEE75-2234

.endblock

.block

copy: 1 id: 82882-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2240

AUTH: POWELL R.J.

CLSS: U

CORP: RCA LABS. (PRINCETON, NJ)

DATE: 7512

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1

DESC: SIMULATION (VUV) ; EXPERIMENTAL

EFFT: TREE

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: RADIATION INDUCED HOLE TRANSPORT AND ELECTRON TUNNEL INJECTION IN
SI02 FILMS (U), 7 P., (U)

TREE: 200

.block

IEEE75-2240

.endblock

.block

copy: 1 id: 82883-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2247

AUTH: KREFFT G.B. ; BEEZHOLD W. ; EERNISSE E.P.

CLSS: U

CORP: SANDIA LABS. (ALBUQUERQUE, NM)

DATE: 7512

DESC: SIMULATION (PROTON) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1

EFFT: TREE

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECT OF IONIZING RADIATION ON DISPLACEMENT DAMAGE IN ION-BOMBARDED
SINGLE CRYSTAL ALPHA A1203 AND ALPHA SI02 (U), 3 P., (U)

TREE: 200

.block

IEEE75-2247

.endblock

.block

copy: 1 id: 82884-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2250
AUTH: RUSSELL T.J. ; ROYCE B.S.H. ; HARARI E.
CLSS: U
CORP: PRINCETON UNIVERSITY (PRINCETON, NJ) ; HUGHES AIRCRAFT CO. (NEWPORT BEACH, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts materials basic mechanisms L1
DESC: SIMULATION ; EXPERIMENTAL
EFFT: X-RAY
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: DISPLACEMENT DAMAGE AND RADIATION EFFECTS IN BORON IMPLANTED SAPPHIRE (U), 3 P., (U)
TREE: 200

.block
IEEE75-2250

.endblock

.block

copy: 1 id: 82885-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2253
AUTH: TREADAWAY M.J. ; PASSENHEIM B.C. ; KITTERER B.D.
CLSS: U
CONN: F 04701 74 C 0237
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: SIMULATION (DYNAMITRON) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical devices sensors IR detectors L1
EFFT: BETA
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: LUMINESCENCE AND ABSORPTION OF ELECTRON-IRRADIATED COMMON OPTICAL GLASSES, SAPPHIRE, AND QUARTZ (U), 6 P., (U)
TREE: 361

.block
IEEE75-2253

.endblock

.block

copy: 1 id: 82886-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2259
AUTH: SWYLER K.J. ; HARDY W.H. ; LEVY P.W.
CLSS: U
CORP: BROOKHAVEN NATIONAL LAB. (UPTON, NY)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 GLASSES
DESC: SIMULATION (ACCELERATOR) ; EXPERIMENTAL
EFFT: BETA
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION INDUCED COLORING OF GLASSES MEASURED DURING AND AFTER
ELECTRON IRRADIATION (U), 6 P., (U)
TREE: 361

.block

IEEE75-2259

.endblock

.block

copy: 1 id: 82887-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2265
AUTH: RANDOLPH L.P. ; LEE J.N. ; OSWALD R.B. JR.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 ZN S ZN SE
DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: LUMINESCENCE OF ZNS AND ZNSE WINDOW AND FILTER MATERIALS (U), 8 P.,
(U)
TREE: 361

.block

IEEE75-2265

.endblock

.block

copy: 1 id: 82888-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2273
AUTH: BARLETT R.H. ; FULK G.A. ; LEE R.S. ; WEINGART R.C.
CLSS: U
CCDE: BUCKL ; TORTE
CORP: UNIVERSITY OF CALIFORNIA (LIVERMORE, CA)
DATE: 7512

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1
EFFT: TREE
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: TEMPERATURE DEPENDENCE OF X-RAY-INDUCED PHOTOCONDUCTIVITY IN KAPTON
AND TEFLON(U), 4 P., (U)
TREE: 200 ; 385

.block

IEEE75-2273

.endblock

.block

copy: 1 id: 82889-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2277
AUTH: KALMA A.H. ; BERGER R.A. ; FISCHER C.J. ; GREEN B.A.
CLSS: U
CCDE: RECOIL
CONN: DAAG 39 73 C 0197
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 GA AS 77-300 DEG K
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: ENERGY AND TEMPERATURE DEPENDENCE OF ELECTRON IRRADIATION DAMAGE IN
GAAS (U), 6 P., (U)
TREE: 200

.block

IEEE75-2277

.endblock

.block

copy: 1 id: 82890-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2283
AUTH: MALLON C.E. ; GREEN B.A. ; LEADON R.E. ; NABER J.A.
CLSS: U
CONN: F 19628 72 C 0311
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 HG CD TE 10 DEG AND 80 DEG K
DESC: SIMULATION (LINAC CF252 NEUTRON GENERATOR) ; EXPERIMENTAL

EFFT: TREE
 SUJO: 3-133-000
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
 TITL: RADIATION EFFECTS IN HG 1-X CD X TE (U), 6 P., (U)
 TREE: 361

.block

IEEE75-2283

.endblock

.block

copy: 1 id: 82891-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2289
 AUTH: CLELAND J.W. ; JAMES F.J. ; WESTBROOK R.D.
 CLSS: U
 CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
 DATE: 7512
 DESC: SIMULATION (CO 60 E BEAM) ; EXPERIMENTAL
 DESC: Nuclear Weapon Effects electronic pieceparts materials basic
 mechanisms L1 GE

EFFT: TREE

SUJO: 3-220-200

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: DEFECT-IMPURITY INTERACTIONS IN IRRADIATED GERMANIUM (U), 6 P., (U)

TREE: 200

.block

IEEE75-2289

.endblock

.block

copy: 1 id: 82892-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2295
 AUTH: GREGORY B.L.
 CLSS: U
 CORP: SANDIA LABS. (ALBUQUERQUE, NM)
 DATE: 7512
 DESC: EXPERIMENTAL
 DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
 HARDENING

EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: PROCESS CONTROLS FOR RADIATION-HARDENED ALUMINUM GATE BULK SILICON
 CMOS (U), 8P., (U)

TREE: 430

.block

IEEE75-2295

.endblock

.block

copy: 1 id: 82893-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2303

AUTH: JOHNSTON A.H. ; SKAVLAND R.L.

CLSS: U

CONN: F 04701 74 C 0247

CORP: BOEING AEROSPACE CO. (SEATTLE, WA)

DATE: 7512

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

CORRELATION BETWEEN ELECTRICAL PARAMETERS AND NEUTRON DAMAGE

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

EFFT: NEUTRON

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL

CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: TERMINAL MEASUREMENTS FOR HARDNESS ASSURANCE IN TTL DEVICES (U), 5

P., (U)

TREE: 610

.block

IEEE75-2303

.endblock

.block

copy: 1 id: 82894-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2308

AUTH: MESSENGER G.C.

CLSS: U

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7512

DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L1

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes

silicon-controlled rectifiers L1 TRANSISTORS

SUJO: 3-213-000 ; 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL

CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: HARDNESS ASSURANCE CONSIDERATIONS FOR THE NEUTRON ENVIRONMENT (U), 6

P., (U)

TREE: 610 ; 649

.block

IEEE75-2308

.endblock

.block

copy: 1 id: 82895-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2314
AUTH: WROBEL T.F. ; BERGER R.A.
CLSS: U
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
DESC: test instruments nuclear radiation gamma L1
DESC: test instruments nuclear radiation beta electron beams L1
SUJO: 4-341-000 ; 4-344-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: SILICON CALORIMETER SYSTEM FOR GAMMA AND ELECTRON-BEAM RADIATION
DOSIMETRY (U), 5 P., (U)
TREE: 651 ; 654

.block

IEEE75-2314

.endblock

.block

copy: 1 id: 82896-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2319
AUTH: LOHKAMP J.E. ; MCKENZIE J.M.
CLSS: U
CCDE: UNFOLD
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SIMULATION (REACTOR) ; EXPERIMENTAL
EFFT: NETURON
SHOT: DIAMOND SCULLS
TSHO: UG-CONTAINED
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: MEASUREMENT OF THE ENERGY DEPENDENCE OF NEUTRON DAMAGE IN SILICON
DEVICES (U), 7 P., (U)
TREE: 310 ; 620

.block

IEEE75-2319

.endblock

.block

copy: 1 id: 82897-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2326
AUTH: ROGERS V.C. ; HARRIS L. JR. ; STEINMAN D.K. ; BRYAN D.E.

CLSS: U
CCDE: END F/B ; KMART ; MACK
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: THEORY
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1
EFFT: NEUTRON
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: SILICON IONIZATION AND DISPLACEMENT KERMA FOR NEUTRONS FROM THERMAL
TO 20 MEV (U), 4 P., (U)

TREE: 200

.block

IEEE75-2326

.endblock

.block

copy: 1 id: 82898-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2330
AUTH: WRIGHT H.L. ; MEASON J.L. ; HOGAN J.C. ; HARVEY J.T.
CLSS: U
CCDE: SPECTRA ; SAND ; RDMM
CORP: UNIVERSITY OF ARKANSAS (FAYETTEVILLE, AR)
DATE: 7512
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic
sources L1
DESC: EXPERIMENTAL
EFFT: NEUTRON
SUJO: 4-241-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: NEUTRON SPECTRAL DISTRIBUTION FROM A GODIVA TYPE CRITICAL ASSEMBLY
(U), 6 P., (U)

TREE: 642

.block

IEEE75-2330

.endblock

.block

copy: 1 id: 82899-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2336
AUTH: COPPAGE F.N.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Simulation Facilities Techniques nuclear radiation reactors isotopic

sources L1 WHITE SANDS FBR AND SPR-II N SPECTRA

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

DESC: SIMULATION (REACTOR) ; EXPERIMENTAL

EFFT: NEUTRON

SUJO: 3-221-000 ; 4-241-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: INFLUENCE OF DOSIMETRY ON EARLIER DAMAGE EQUIVALENCE RATIOS (U), 4
P., (U)

TREE: 310 ; 642

.block

IEEE75-2336

.endblock

.block

copy: 1 id: 82900-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2340

AUTH: LONGMIRE C.L.

CLSS: U

CCDE: DAVID

CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)

DATE: 7512

DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability

L1

DESC: SURVEY

EFFT: IEMP ; OTHER ; SGEMP

EMPF: 390

SUJO: 4-170-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: STATE OF THE ART IN IEMP AND SGEMP CALCULATIONS (U), 5 P., (U)

.block

IEEE75-2340

.endblock

.block

copy: 1 id: 82901-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2345

AUTH: CHADSEY W.L. ; WILSON C.W. ; PINE V.W.

CLSS: U

CCDE: POEM ; SANDYL ; FASTER-BETA ; QUICKE2 ; EASY1

CORP: SCIENCE APPLICATIONS, INC. (MCLEAN, VA)

DATE: 7512

DESC: THEORY

DESC: Radiation Transport x-ray L1

DESC: Nuclear Weapon Effects materials metals alloys L1 AL CU MO TA

EFFT: X-RAY

EMPF: 391
 SUJO: 3-243-000 ; 9-640-000
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
 TITL: X-RAY PHOTOEMISSION CALCULATIONS (U), 6 P., (U)
 TREE: 980

.block
 IEEE75-2345

.endblock

.block

copy: 1 id: 82902-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2351
 AUTH: LITTLE R.G. ; UGLUM J.R. ; LOWELL R.A.
 CLSS: U
 CORP: SIMULATION PHYSICS, INC. (BURLINGTON, MA)
 DATE: 7512
 DESC: SIMULATION (ELECTRON BEAM ACCELERATOR) ; EXPERIMENTAL
 DESC: Nuclear Weapon Effects electronic piecparts materials basic
 mechanisms L1

EFFT: IEMP
 EMPF: 391
 SUJO: 3-220-200
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
 TITL: CAVITY IEMP ENHANCEMENT BY DIELECTRIC WALLS (U), 5 P., (U)

.block
 IEEE75-2351

.endblock

.block

copy: 1 id: 82903-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2356
 AUTH: HALBLEIB J.A. ; VANDEVENDER W.H.
 CLSS: U
 CORP: SANDIA LABS. (ALBUQUERQUE, NM)
 DATE: 7512
 DESC: Nuclear Weapon Effects materials metals alloys L1 AU
 DESC: Radiation Transport electron L1
 DESC: SIMULATION (E BEAM) ; THEORY EXPERIMENTAL
 EFFT: BETA
 EMPF: 391
 SUJO: 3-243-000 ; 9-680-000
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
 TITL: COUPLED ELECTRON/PHOTON TRANSPORT IN STATIC EXTERNAL MAGNETIC FIELDS
 (U), 6 P., (U)
 TREE: 990

.block

IEEE75-2356

.endblock

.block

copy: 1 id: 82904-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2362

AUTH: WENAAS E.P. ; ROGERS S. ; WOODS A.J.

CLSS: U

CCDE: ABORC ; POEM ; QUICKE2 ; GRAP2

CONN: DNA 001 75 C 0071

CORP: IRT CORP. (SAN DIEGO, CA)

DATE: 7512

DESC: Radiation Transport x-ray L1

DESC: Radiation Transport electron L1

DESC: THEORY

DESC: Nuclear Weapon Effects materials metals alloys L1 CU AL

EFFT: IEMP

EMPF: 391

SUJO: 3-243-000 ; 9-640-000 ; 9-680-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: SENSITIVITY OF SGEMP RESPONSE TO INPUT PARAMETERS (U), 6 P., (U)

.block

IEEE75-2362

.endblock

.block

copy: 1 id: 82905-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2368

AUTH: PARKS D.E. ; WILSON A.R. ; KATZ I.

CLSS: U

CCDE: FRED/EX

CORP: SYSTEMS, SCIENCE AND SOFTWARE (LA JOLLA, CA)

DATE: 7512

DESC: THEORY TABULAR

DESC: Nuclear Weapon Effects space systems L1

EFFT: IEMP

EMPF: 391

SUJO: 3-114-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: MONODE PLASMA SHEATH DYNAMICS (U), 6 P., (U)

.block

IEEE75-2368

.endblock

.block

copy: 1 id: 82906-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2374
AUTH: WOODS A.J. ; WENAAS E.P.
CLSS: U
CCDE: ABORC ; POEM
CONN: DNA 001 75 C 0071
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: THEORY
DESC: Radiation Transport electron L1
DESC: Radiation Transport x-ray L1
EFFT: OTHER ; SGEMP
EMPF: 398
SUJO: 9-640-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
SYST: SKYNET SATELLITE
TITL: SGEMP GEOMETRY EFFECTS (U), 7 P., (U)

.block

IEEE75-2374

.endblock

.block

copy: 1 id: 82907-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2381
AUTH: HARBERGER J.H. ; LONGMIRE C.L.
CLSS: U
CONN: DNA 001 75 C 0094
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7512
DESC: THEORY
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: EMP
EMPF: 388
SUJO: 3-231-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: DIFFUSION APPROXIMATION TO SURFACE CURRENTS IN A LONG METAL CYLINDER
DUE TO EXCITATION BY A LONGITUDINAL ELECTRIC FIELD (U), 5 P., (U)

.block

IEEE75-2381

.endblock

.block

copy: 1 id: 82908-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2386
AUTH: RICH W.F. ; FISHER R.J. ; CLARKE C.A.
CLSS: U
CCDE: DICIR ; MYOPIC ; BORSAT
CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO)
DATE: 7512
DESC: THEORY
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 DIODE
EFFT: OTHER ; SGEMP
EMPF: 398
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: POTENTIALS AND CURRENTS INDUCED ON SATELLITES BY PROMPT PHOTON
IRRADIATION (U), 6 P., (U)

.block

IEEE75-2386

.endblock

.block

copy: 1 id: 82909-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2392
AUTH: FISHER R.J. ; DUVAL J.S. ; RICH W.F.
CLSS: U
CCDE: EPIC
CORP: KAMAN SCIENCES CORP. (COLORADO SPRINGS, CO)
DATE: 7512
DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL
DESC: Nuclear RDT&E Research Program Descriptions electronic vulnerability
L1
EFFT: IEMP ; OTHER ; SGEMP
EMPF: 391
SUJO: 4-170-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EXPERIMENTAL SGEMP RESULTS USING ELECTRON BEAM INJECTION (U), 5 P.,
(U)

.block

IEEE75-2392

.endblock

.block

copy: 1 id: 82910-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2397
AUTH: HIGGINS D.F.
CLSS: U
CCDE: QUASI ; SEMP

CONN: F 29601 74 C 0039
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7512
DESC: THEORY
DESC: Nuclear Weapon Effects space systems L1
DESC: Radiation Transport x-ray L1
DESC: Radiation Transport electron L1
EFFT: OTHER ; SGEMP
EMPF: 398
SUJO: 3-114-000 ; 9-640-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: HYBRID TECHNIQUE FOR SGEMP STRUCTURAL REPLACEMENT CURRENT
CALCULATIONS (U), 5 P., (U)

.block

IEEE75-2397

.endblock

.block

copy: 1 id: 82911-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2402
AUTH: STETTNER R.
CLSS: U
CORP: MISSION RESEARCH CORP. (SANTA BARBARA, CA)
DATE: 7512
DESC: THEORY
DESC: Radiation Transport electron L1
DESC: Radiation Transport x-ray L1
DESC: Nuclear Weapon Effects space systems L1
EFFT: IEMP ; OTHER ; SGEMP
EMPF: 398
SUJO: 3-114-000 ; 9-640-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECTS OF VARIOUS NON-CONDUCTING GAPS AND SURFACES ON SGEMP AND
IEMP RESPONSE(U), 6 P., (U)

.block

IEEE75-2402

.endblock

.block

copy: 1 id: 82912-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2408
AUTH: CHU R.S. ; TERRELL J.H.
CLSS: U
CCDE: MOC
CORP: GTE SYLVANIA, INC. (NEEDHAM HEIGHTS, MA)
DATE: 7512

DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
DESC: THEORY
EFFT: IEMP
EMPF: 392 ; 388
SUJO: 3-231-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: APPLICATION OF METHOD OF CHARACTERISTICS TO IEMP CABLE RESPONSE (U),
5 P., (U)
TREE: 390

.block

IEEE75-2408

.endblock

.block

copy: 1 id: 82913-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2413
AUTH: MANGAN D.L.
CLSS: U
CONN: F 29601 74 C 0107
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7512
DESC: THEORY
DESC: Nuclear Weapon Effects electrical mechanical cables wires L1
EFFT: OTHER ; SGEMP
EMPF: 392
REPN: AMRC R 51
SUJO: 3-231-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: SIMULATING CABLE BUNDLE SGEMP EXCITATION, A THEORETICAL FEASIBILITY
STUDY (U), 7 P., (U)

.block

IEEE75-2413

.endblock

.block

copy: 1 id: 82914-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2420
AUTH: MANGAN D.L. ; PERALA R.A.
CLSS: U
CONN: F 29601 74 C 0107
CORP: MISSION RESEARCH CORP. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Radiation Transport electron L1
DESC: THEORY
DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
rings L1

DESC: Radiation Transport x-ray L1
 EFFT: IEMP ; OTHER ; SGEMP
 EMPF: 398 ; 726
 SUJO: 3-259-400 ; 9-640-000 ; 9-680-000
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
 TITL: SATELLITE SGEMP SURFACE CURRENT SIMULATION TECHNIQUES, A THEORETICAL
 INVESTIGATION (U), 8 P., (U)

.block

IEEE75-2420

.endblock

.block

copy: 1 id: 82915-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2428
 AUTH: ROSADO J.A.
 CLSS: U
 CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
 DATE: 7512
 DESC: Simulation Facilities Techniques TREE L1 ANVIL 160 PULSER
 DESC: EXPERIMENTAL
 EFFT: OTHER ; SGEMP
 EMPF: 398
 SUJO: 4-272-000
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
 SYST: SKYNET SATELLITE
 TITL: ELECTRICAL INJECTION SIMULATION OF SGEMP (U), 3 P., (U)

.block

IEEE75-2428

.endblock

.block

copy: 1 id: 82916-1001 library: DOCUMENT price: \$.00
 cat1: cat2: home: STACKS current: STACKS
 created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2431
 AUTH: BOYD R.G.
 CLSS: U
 CORP: TRW SYSTEMS GROUP (REDONDO BEACH, CA)
 DATE: 7512
 DESC: Nuclear Weapon Effects structures aboveground models cylinders cones
 rings L1
 DESC: Radiation Transport electron L1
 DESC: THEORY
 EFFT: IEMP
 EMPF: 388
 SUJO: 3-259-400 ; 9-680-000
 SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
 CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: ELECTRIC CURRENT INDUCED ON INSULATED METALLIC CYLINDER BY COMPTON
CURRENT PULSES IN IONIZED AIR (U), 3 P., (U)

.block

IEEE75-2431

.endblock

.block

copy: 1 id: 82917-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2434

AUTH: BLOOM G.E.

CLSS: U

CONN: F 29601 74 C 0039

CORP: IRT CORP. (SAN DIEGO, CA)

DATE: 7512

DESC: RF EMP shielding protection L1

DESC: EXPERIMENTAL

EFFT: IEMP

EMPF: 399

SUJO: 9-810-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: USING FERRITE BEADS AS AN SGEMP REDUCTION TOOL (U), 5 P., (U)

.block

IEEE75-2434

.endblock

.block

copy: 1 id: 82918-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2440

AUTH: GIALLORENZI T.G. ; WELLER J.F.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7512

DESC: SURVEY

DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1

EFFT: TREE

SUJO: 3-133-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: INTEGRATED AND FIBER OPTICAL DEVICES AND SYSTEM (U), 8 P., (U)

TREE: 361

.block

IEEE75-2440

.endblock

.block

copy: 1 id: 82919-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2448
AUTH: WILSEY N.D. ; GUENZER C.S. ; MOLNAR B. ; MOORE W.J.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)
DATE: 7512
DESC: SIMULATION (CYCLOTRON D-T REACTION GENERATOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: NEUTRON
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: COMPARISON OF FAST NEUTRON IRRADIATION EFFECTS IN PHOTOCONDUCTIVE
AND PHOTOVOLTAIC INSB INFRARED DETECTORS (U), 8 P., (U)
TREE: 361

.block
IEEE75-2448

.endblock
.block
copy: 1 id: 82920-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2456
AUTH: PICKEL J.C. ; PETROFF M.D.
CLSS: U
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1 MEVCAD
DESC: SIMULATION (CO 60 CO 137 CO 57 SR 90) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: NUCLEAR RADIATION INDUCED NOISE IN INFRARED DETECTORS (U), 6 P., (U)
TREE: 361

.block
IEEE75-2456

.endblock
.block
copy: 1 id: 82921-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2462
AUTH: EVANS B.D. ; SIGEL G.H. JR.
CLSS: U
CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7512
DESC: SIMULATION (CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: TREE
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION RESISTANT FIBER OPTIC MATERIALS AND WAVEGUIDES (U), 6 P.,
(U)
TREE: 361

.block

IEEE75-2462

.endblock

.block

copy: 1 id: 82922-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2468
AUTH: MATTERN P.L. ; WATKINS L.M. ; SKOOG C.D. ; BARSIS E.H.
CLSS: U
CORP: SANDIA LABS. (LIVERMORE, CA)
DATE: 7512
DESC: SIMULATION (CO 60 SR 90 NEUTRON GENERATOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
EFFT: TREE
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ABSORPTION INDUCED IN OPTICAL WAVEGUIDES BY PULSED ELECTRONS AS A
FUNCTION OF TEMPERATURE, LOW DOSE RATE GAMMA AND BETA RAYS, AND 14
MEV NEUTRONS (U), 7 P.,(U)

TREE: 361

.block

IEEE75-2468

.endblock

.block

copy: 1 id: 82923-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2475
AUTH: SODA K.J. ; BARNES C.E. ; KIEHL R.A.
CLSS: U
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM) ; SANDIA LABS.
(ALBUQUERQUE, NM)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: SIMULATION (CO 60) ; EXPERIMENTAL

EFFT: GAMMA
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECT OF GAMMA IRRADIATION ON OPTICAL ISOLATORS (U), 7 P., (U)
TREE: 361

.block

IEEE75-2475

.endblock

.block

copy: 1 id: 82924-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2482
AUTH: HUM R.H. ; BARRY A.L.
CLSS: U
CORP: COMMUNICATIONS RESEARCH CENTRE (OTTAWA ONTARIO, CANADA)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: SIMULATION (CYCLOTRON CO 60 VAN DE GRAAF NEUTRON GENERATOR) ;
EXPERIMENTAL

EFFT: TREE
SUJO: 3-133-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION DAMAGE CONSTANTS OF LIGHT-EMITTING DIODES BY A LOW-CURRENT
EVALUATION METHOD (U), 6 P., (U)

TREE: 361

.block

IEEE75-2482

.endblock

.block

copy: 1 id: 82925-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2488
AUTH: BORREGO J.M. ; GUTMANN R.J. ; NARAIN J.
CLSS: U
CORP: RENSSELAER POLYTECHNIC INSTITUTE (TROY, NY)
DATE: 7512
DESC: SIMULATION (LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 BARITT DIODES

EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TRANSIENT IONIZING RADIATION EFFECTS ON BARITT DIODE OSCILLATORS
(U), 6 P., (U)

TREE: 310

.block

IEEE75-2488

.endblock

.block

copy: 1 id: 82926-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2494

AUTH: JENKINS C.R. ; DURGIN D.L.

CLSS: U

CONN: F 29601 74 C 0008

CORP: BDM CORP. (ALBUQUERQUE, NM)

DATE: 7512

DESC: SIMULATION (POWER PULSE) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

EFFT: EMP

EMPF: 341

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL

CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EMP SUSCEPTIBILITY OF INTEGRATED CIRCUITS (U), 6 P., (U)

.block

IEEE75-2494

.endblock

.block

copy: 1 id: 82927-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2500

AUTH: RICE D.H.

CLSS: U

CCDE: SCEPTRE

CORP: GTE SYLVANIA (NEEDHAM, MA)

DATE: 7512

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes

silicon-controlled rectifiers L1 SYNERGISTIC EFFECTS

DESC: SIMULATION (POWER PULSE RADIATION PULSE) ; THEORY EXPERIMENTAL

EFFT: GAMMA ; EMP

EMPF: 393

SUJO: 3-221-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL

CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: TRANSISTOR COLLECTOR BREAKDOWN IN THE PRESENCE OF CONDUCTED EMP AND

GAMMA RADIATION (U), 3 P., (U)

TREE: 310

.block

IEEE75-2500

.endblock

.block

copy: 1 id: 82928-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2503
AUTH: BERG N.J. ; UDELSON B.J.
CLSS: U
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7512
DESC: Nuclear Weapon Effects Communications Systems C4 hardware radio
microwave systems L1
DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L1
DESC: SIMULATION (HI FX) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-132-220 ; 3-213-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECTS OF PULSED IONIZING RADIATION ON THE OPERATION OF SURFACE
ACOUSTIC WAVEAMPLIFIERS AND CONVOLVERS (U), 7 P., (U)
TREE: 369

.block
IEEE75-2503

.endblock

.block

copy: 1 id: 82929-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2510
AUTH: KALMA A.H. ; FISCHER C.J.
CLSS: U
CONN: F 29601 74 C 0039
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: SIMULATION (POWER PULSE) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects Communications Systems C4 hardware optical
devices sensors IR detectors L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
EFFT: EMP
EMPF: 341
SUJO: 3-133-000 ; 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRICAL PULSE BURNOUT TESTING OF LIGHT-EMITTING DIODES (U), 6 P.,
(U)

.block
IEEE75-2510

.endblock

.block

copy: 1 id: 82930-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2516
AUTH: SNOWDEN D.P. ; FLANAGAN T.M.
CLSS: U
CCDE: PN
CONN: DAAG 39 75 C 0152
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1
DESC: MOS CAPACITORS SIMULATION (PULSED RADIATION) 77 DEG -450 DEG K ;
EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TRANSIENT RESPONSE OF MOS CAPACITORS TO HIGH-ENERGY ELECTRON
IRRADIATION (U), 6 P., (U)
TREE: 325

.block
IEEE75-2516

.endblock

.block

copy: 1 id: 82931-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2522
AUTH: TASCA D.M. ; WUNSCH D.C. ; DOMINGOS H.
CLSS: U
CORP: GENERAL ELECTRIC CO. (VALLEY FORGE, PA) ; AIR FORCE WEAPONS LAB.
(KIRTLAND AFB, NM) ; CLARKSON COLLEGE OF TECHNOLOGY (POTSDAM, NY)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 RESISTORS
DESC: SIMULATION (POWER PULSE) ; EXPERIMENTAL
EFFT: EMP
EMPF: 342
SUJO: 3-229-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: DEVICE DEGRADATION BY HIGH AMPLITUDE CURRENTS AND RESPONSE
CHARACTERISTICS OF DISCRETE RESISTORS (U), 6 P., (U)

.block
IEEE75-2522

.endblock

.block

copy: 1 id: 82932-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2528
AUTH: HARTMAN E.F. ; EVANS D.C.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 SYNERGISTIC EFFECTS
DESC: SIMULATION (POWER PULSE ELECTRON BEAM GENERATOR) ; EXPERIMENTAL
EFFT: EMP ; TREE
EMPF: 393
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRICAL PULSE BURNOUT OF TRANSISTORS IN INTENSE IONIZING
RADIATION (U), 5 P., (U)
TREE: 310

.block

IEEE75-2528

.endblock

.block

copy: 1 id: 82933-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2533
AUTH: ASHLEY J.C. ; TUNG C.J. ; RITCHIE R.H.
CLSS: U
CONN: Y75 886
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7512
DESC: Radiation Transport electron L1
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 AL 2 O3
DESC: Nuclear Weapon Effects materials metals alloys L1 AL
DESC: THEORY
EFFT: BETA
SUJO: 3-220-200 ; 3-243-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRON INTERACTION CROSS SECTIONS IN A1 AND A1203; CALCULATIONS OF
MEAN FREEPATHS, STOPPING POWERS, AND ELECTRON SLOWING-DOWN SPECTRA
(U), 4 P., (U)
TREE: 990

.block

IEEE75-2533

.endblock

.block

copy: 1 id: 82934-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2537
AUTH: LOCKWOOD G.J. ; MILLER G.H. ; HALBLEIB J.A.
CLSS: U
CCDE: TIGER ; SANDYL
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Radiation Transport electron L1
DESC: Nuclear Weapon Effects materials metals alloys L1 BE AL TI MO TA U
DESC: SIMULATION (E BEAM) ; EXPERIMENTAL
EFFT: BETA
SUJO: 3-243-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: SIMULTANEOUS INTEGRAL MEASUREMENT OF ELECTRON ENERGY AND CHARGE
ALBEDOS (U), 6P., (U)
TREE: 990

.block

IEEE75-2537

.endblock

.block

copy: 1 id: 82935-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2543
AUTH: BURKE E.A.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA)
DATE: 7512
DESC: THEORY
DESC: Radiation Transport x-ray L1
SUJO: 9-640-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: IONIZING EVENTS IN SMALL DEVICE STRUCTURES (U), 6 P., (U)
TREE: 200

.block

IEEE75-2543

.endblock

.block

copy: 1 id: 82936-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2549
AUTH: DELLIN T.A. ; HUDDLESTON R.E. ; MACCALLUM C.J.
CLSS: U
CCDE: QUICKE 3 ; SANDYL ; P2 ANALYTICAL PREDICTION ; P19 ANALYTICAL
PREDICTION
CORP: SANDIA LABS. (LIVERMORE, CA) ; SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Nuclear Weapon Effects materials metals alloys L1 AL CU P6 AU SN

DESC: SIMULATION (CO 60) ; THEORY EXPERIMENTAL
DESC: Radiation Transport gamma L1
DESC: Nuclear Weapon Effects materials carbon L1
EMPF: 391
SUJO: 3-243-000 ; 3-248-000 ; 9-620-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: SECOND GENERATION ANALYTICAL PHOTO-COMPTON METHODS (U), 7 P., (U)
TREE: 960

.block

IEEE75-2549

.endblock

.block

copy: 1 id: 82937-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2556
AUTH: FREDERICKSON A.R.
CLSS: U
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (HANSCOM AFB, MA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 POLYETHYLENE TEFLON
DESC: SIMULATION (CO 60) ; THEORY EXPERIMENTAL
DESC: Radiation Transport gamma L1
EFFT: TREE
EMPF: 391
SUJO: 3-220-200 ; 9-620-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: CHARGE DEPOSITION, PHOTOCONDUCTION, AND REPLACEMENT CURRENT IN
IRRADIATED MULTILAYER STRUCTURES (U), 6 P., (U)
TREE: 960

.block

IEEE75-2556

.endblock

.block

copy: 1 id: 82938-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2562
AUTH: GARTH J.C. ; CHADSEY W.L. ; SHEPPARD R.L. JR.
CLSS: U
CCDE: POEM
CORP: AIR FORCE CAMBRIDGE RESEARCH LABS. (BEDFORD, MA) ; SCIENCE
APPLICATIONS, INC. (MCLEAN, VA) ; SCIENCE APPLICATIONS, INC.
(BEDFORD, MA)
DATE: 7512
DESC: Radiation Transport x-ray L1
DESC: THEORY

DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 AU/SI AU/POLYETHYLENE INTERFACE
SUJO: 3-220-200 ; 9-640-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: MONTE CARLO ANALYSIS OF DOSE PROFILES NEAR PHOTON IRRADIATED
MATERIAL INTERFACES (U), 6 P., (U)

TREE: 960

.block

IEEE75-2562

.endblock

.block

copy: 1 id: 82939-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2568

AUTH: BERGER R.A. ; AZAREWICZ J.L.

CLSS: U

CCDE: SANDYL

CONN: F 04701 72 C 0322

CORP: IRT CORP. (SAN DIEGO, CA)

DATE: 7512

DESC: SIMULATION (FLASH X-RAY) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 SWITCHES

EFFT: TREE

SUJO: 3-221-000 ; 3-229-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: PACKAGING EFFECTS ON TRANSISTOR RADIATION RESPONSE (U), 5 P., (U)

TREE: 388 ; 310

.block

IEEE75-2568

.endblock

.block

copy: 1 id: 82940-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2573

AUTH: LURIE N.A. ; HARRIS L. JR. ; STEINMAN D.K. ; YOUNG J.C. ;
FRISENHAHN S.J. ; WONDRA J.P.

CLSS: U

CCDE: SANDYL

CORP: IRT CORP. (SAN DIEGO, CA)

DATE: 7512

DESC: Radiation Transport neutron L1

DESC: SIMULATION (LINAC) ; EXPERIMENTAL

DESC: Nuclear Weapon Effects materials metals alloys L1 TA

DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 CAPACITOR
EFFT: NETURON
SUJO: 3-229-000 ; 3-243-000 ; 9-650-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: NEUTRON-INDUCED DOSE ENHANCEMENT IN TANTALUM (U), 3 P., (U)
TREE: 970

.block

IEEE75-2573

.endblock

.block

copy: 1 id: 82941-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2576
AUTH: SCHALLHORN D.R. ; OSWALD R.B. JR. ; SCHARF W.D. ; SKILLINGTON G.L. ;
OLDHAM T.R. ; BABA A.J.
CLSS: U
CCDE: TWODY 3 ; ZEBRA
CORP: HARRY DIAMOND LABS. (ADELPHI, MD)
DATE: 7512
DESC: SIMULATION (E-BEAM) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects materials metals alloys L1 AL
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI-KOVAR SI-KOVAR-GLASS
DESC: Radiation Transport electron L1
EFFT: BETA
SUJO: 3-220-200 ; 3-243-000 ; 9-680-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: TWO-DIMENSIONAL THERMOMECHANICAL RESPONSE OF MATERIALS, LAMINATES
AND STRUCTURES TO PULSED ELECTRON BEAMS (U), 6 P., (U)
TREE: 990

.block

IEEE75-2576

.endblock

.block

copy: 1 id: 82942-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2582
AUTH: LURIE N.A. ; STEINMAN D.K. ; HARRIS L. JR. ; WONDRA J.P.
CLSS: U
CCDE: SANDYL
CONN: DNA 001 73 C 0259 ; F 19628 75 C 0208
CORP: IRT CORP. (SAN DIEGO, CA)
DATE: 7512
DESC: test instruments nuclear radiation gamma L1
DESC: SIMULATION (AM 241 CS 137 CO 60 NA 24 ; EXPERIMENTAL

SUJO: 4-341-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: GAMMA-RAY ENERGY DEPOSITION IN SILICON DETECTORS (U), 4 P., (U)
TREE: 651

.block

IEEE75-2582

.endblock

.block

copy: 1 id: 82943-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2586
AUTH: KENNEDY D.P.
CLSS: U
CORP: UNIVERSITY OF FLORIDA (GAINESVILLE, FL)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: THEORY
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: MATHEMATICAL ANALYSIS OF BIPOLAR TRANSISTORS (U), 9 P., (U)
TREE: 250 ; 310

.block

IEEE75-2586

.endblock

.block

copy: 1 id: 82944-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2595
AUTH: DANIEL M.E. ; COPPAGE F.N.
CLSS: U
CORP: SANDIA LABS. (ALBUQUERQUE, NM)
DATE: 7512
DESC: SIMULATION (PULSED REACTOR GAMMA IRRADIATION FACILITY) ;
EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TTTL: RADIATION HARDNESS OF A HIGH SPEED ECL MICROCIRCUIT (U), 5 P., (U)
TREE: 430

.block

IEEE75-2595

.endblock

.block

copy: 1 id: 82945-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2600
AUTH: PEASE R.L.
CLSS: U
CORP: NAVAL WEAPONS SUPPORT CENTER (CRANE, IN)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (REACTOR CO 60) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION DAMAGE TO INTEGRATED INJECTION LOGIC CELLS (U), 5 P., (U)
TREE: 320

.block

IEEE75-2600

.endblock

.block

copy: 1 id: 82946-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2605
AUTH: RAYMOND J.P. ; WONG T.Y. ; SCHUEGRAF K.K.
CLSS: U
CONN: DNA 001 73 C 0154
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7512
DESC: SIMULATION (CO 60 REACTOR FLASH X-RAY LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION EFFECTS ON BIPOLAR INTEGRATED INJECTION LOGIC (U), 6 P.,
(U)
TREE: 320

.block

IEEE75-2605

.endblock

.block

copy: 1 id: 82947-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2611
AUTH: ALEXANDER D.R. ; TURFLER R.M.

CLSS: U
CCDE: SCEPTRE
CORP: BDM CORP. (ALBUQUERQUE, NM)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: THEORY
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: MOS MODELING HIERARCHY INCLUDING RADIATION EFFECTS (U), 6 P., (U)
TREE: 250

.block

IEEE75-2611

.endblock

.block

copy: 1 id: 82948-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2617
AUTH: PHILLIPS D.H.
CLSS: U
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)
DATE: 7512
DESC: SIMULATION ; THEORY EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: CMOS/SOS GATE SAPPHIRE PHOTOCURRENT COMPENSATION (U), 4 P., (U)
TREE: 430 ; 250 ; 325

.block

IEEE75-2617

.endblock

.block

copy: 1 id: 82949-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2621
AUTH: BRUCKER G.J.
CLSS: U
CONN: F 33615 72 C 1679
CORP: RCA, ASTRO ELECTRONICS DIV. (PRINCETON, NJ)
DATE: 7512
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
MEMORY
DESC: SIMULATION (FLASH X-RAY LINAC CO 60) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
EFFT: TREE

SUJO: 3-212-000 ; 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: PROPERTIES OF FULLY DECODED 256 BIT PMNOS/PMOS/SOS/AL-GATE MEMORY IN
RADIATIONENVIRONMENT (U), 8 P., (U)

TREE: 325

.block

IEEE75-2621

.endblock

.block

copy: 1 id: 82950-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2629

AUTH: NIELSEN R.L. ; BUTCHER D.T. ; RONEN R.S.

CLSS: U

CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)

DATE: 7512

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: SIMULATION (CO 60 LINAC) ; EXPERIMENTAL

EFFT: TREE

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: ELECTRICAL AND RADIATION CHARACTERISTICS OF MOS/SOS LINEAR DEVICES
(U), 5 P., (U)

TREE: 320

.block

IEEE75-2629

.endblock

.block

copy: 1 id: 82951-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2634

AUTH: KILLIANY J.M. ; SAKS N.S. ; BAKER W.D.

CLSS: U

CORP: NAVAL RESEARCH LAB. (WASH., DC)

DATE: 7512

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

CCD

DESC: SIMULATION (CO 60) ; EXPERIMENTAL

EFFT: GAMMA

SUJO: 3-222-000

SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS

TITL: EFFECTS OF IONIZING RADIATION ON A 256-STAGE LINEAR CCD IMAGER (U),
5 P., (U)

TREE: 430 ; 320

.block

IEEE75-2634
.endblock
.block
copy: 1 id: 82952-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2639
AUTH: WILLIAMS R.A. ; NELSON R.D.
CLSS: U
CORP: ROCKWELL INTERNATIONAL CORP. (ANAHEIM, CA)
DATE: 7512
DESC: SIMULATION (FLASH X-RAY CO 60 REACTOR) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
CCD
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: RADIATION EFFECTS IN CHARGE COUPLED DEVICES (U), 6 P., (U)
TREE: 320

.block
IEEE75-2639
.endblock

.block
copy: 1 id: 82953-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2645
AUTH: LUTZKY M. ; DEAN E.B. ; PETREE M.C.
CLSS: U
CCDE: NET 2
CORP: NAVAL SURFACE WEAPONS CENTER (SILVER SPRING, MD)
DATE: 7512
DESC: THEORY
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 MODELING
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: MODELING SECOND BREAKDOWN IN PN JUNCTIONS WITH NET-2 (U), 5 P., (U)
TREE: 250

.block
IEEE75-2645
.endblock

.block
copy: 1 id: 82954-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: IEEE75-2650
AUTH: HONNOLD V.R. ; GOLDBERG M. ; SCHREINER W.A. ; WITTELES A.A.
CLSS: U
CCDE: SANDYL
CORP: TRW SYSTEMS GROUP (REDONDO BEACH, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: SIMULATION (FXR) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-222-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: INVESTIGATION OF JI AND DI CMOS FXR RESPONSE AT DIFFERENT SPECTRAL
ENERGIES (U), 6 P., (U)
TREE: 325

.block

IEEE75-2650

.endblock

.block

copy: 1 id: 82955-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2656
AUTH: SROUR J.R. ; OTHMER S. ; CHIU K.Y.
CLSS: U
CONN: NAS 3 17849
CORP: NORTHROP RESEARCH AND TECHNOLOGY CENTER (HAWTHORNE, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts solar cells L1
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI
DESC: SIMULATION (DYNAMITRON VAN DE GRAAFF) ; EXPERIMENTAL
EFFT: TREE
SUJO: 3-220-200 ; 3-223-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: ELECTRON AND PROTON DAMAGE COEFFICIENTS IN LOW-RESISTIVITY SILICON
(U), 7 P., (U)
TREE: 200

.block

IEEE75-2656

.endblock

.block

copy: 1 id: 82956-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2663
AUTH: VAN LINT V.A.J. ; GIGAS G. ; BARENGOLTZ J.
CLSS: U
CONN: NAS 7 100

CORP: CALIFORNIA INSTITUTE OF TECHNOLOGY (PASADENA, CA)
DATE: 7512
DESC: SURVEY
DESC: Nuclear Weapon Effects electronic pieceparts materials basic
mechanisms L1 SI
EFFT: TREE
SUJO: 3-220-200
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: CORRELATION OF DISPLACEMENT EFFECTS PRODUCED BY ELECTRONS PROTONS
AND NEUTRONS IN SILICON (U), 6 P., (U)

TREE: 200

.block

IEEE75-2663

.endblock

.block

copy: 1 id: 82957-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2669
AUTH: PRICE W.E. ; STANLEY A.G.
CLSS: U
CONN: NAS 7 100
CORP: CALIFORNIA INSTITUTE OF TECHNOLOGY (PASADENA, CA)
DATE: 7512
DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1
DESC: SIMULATION (CO 60 VAN DE GRAAFF DYNAMITRON) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L1 SWITCHES
EFFT: TREE
SUJO: 3-221-000 ; 3-222-000 ; 3-229-000
SYMJ: IEEE TRANSACTION ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: HARDENING OF MJS77 SPACECRAFT AGAINST THE JUPITER RADIATION BELTS
(U), 6 P., (U)
TREE: 388 ; 320 ; 310

.block

IEEE75-2669

.endblock

.block

copy: 1 id: 82958-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: IEEE75-2696
AUTH: CHIWAKI M. ; TOMIMASU T.
CLSS: U
CORP: ELECTROTECHNICAL LAB. (TANASHI TOKYO, JAPAN)
DATE: 7512

DESC: SIMULATION (LINAC) ; EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 JFET MOSFET
EFFT: TREE
SUJO: 3-221-000
SYMJ: IEEE TRANSACTIONS ON NUCLEAR SCIENCE; VOL. NS-22, NO. 6, ANNUAL
CONFERENCE ON NUCLEAR AND SPACE RADIATION EFFECTS
TITL: EFFECT OF RADIATION DAMAGE ON THE NOISE PERFORMANCE OF FET'S (U), 7
P., (U)
TREE: 320

.block

IEEE75-2696

.endblock

.block

copy: 1 id: 82959-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD A017220
ADNO: A017220
AUTH: TEDESCO F.P.
CLSS: U
CORP: AIR FORCE INSTITUTE OF TECHNOLOGY (WRIGHT-PATTERSON AFB, OH)
DATE: 7503
REPN: GNE/PH/75 11
TITL: SINGLE SCATTER MODEL FOR THERMAL RADIATION (U), CA. 125 P., (U)

.block

MAD A017220

.endblock

.block

copy: 1 id: 85176-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD A020193
ADNO: A020193
AUTH: LINDSTEN D.C. ; SCHMITT R.P.
CLSS: U
CORP: ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT CENTER (FT.
BELVOIR, VA)
DATE: 7503
REPN: AMERDC 2136
TITL: DECONTAMINATION OF WATER CONTAINING RADIOLOGICAL WARFARE AGENTS (U),
94 P., (U)

.block

MAD A020193

.endblock

.block

copy: 1 id: 85200-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD B001240
ADNO: B001240
AUTH: BOECKER B. ; CLAUSEN K. ; JOHNSEN P.
CLSS: U
CORP: BUNDESMINISTERIUM DER VERTEIDIGUNG BONN (WEST GERMANY)
DATE: 7400
DESC: Radiation Transport neutron L1
LA: FGR -IN GERMAN
REPN: BMVG FBWT 74 12
SUJO: 9-650-000
TITL: SCALARE RADIATION FIELD OF A NEUTRON SOURCE IN LIQUID NITROGEN (U),
CA. 40 P., (U)

.block

MAD B001240

.endblock

.block

copy: 1 id: 85299-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD C001354
ADNO: C 001354
AUTH: COLLIER W.D.
CLSS: S
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM)
DATE: 7502
REPN: AFWL TR 75 80
TEMP: A9398
TITL: AFWL TECHNICAL OBJECTIVE NUMBER 2 ADVANCED RADIATION TECHNOLOGY (U),
24 P., (S)

.block

MAD C001354

.endblock

.block

copy: 1 id: 85318-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD525722
ADNO: 525722
AUTH: COLLIER W.D.
CLSS: S
CORP: AIR FORCE WEAPONS LAB. (KIRTLAND AFB, NM.)
DATE: 7304
REPN: AFWL TR 73 91
TEMP: A3926
TITL: AFWL TECHNICAL OBJECTIVE NUMBER 2--ADVANCED RADIATION TECHNOLOGY
(U), 26 P., (S)

.block

MAD525722

.endblock

.block

copy: 1 id: 85901-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: MAD529541L
ADNO: 529541L
AUTH: BREUCH R.A. ; JUNG A.F.A. ; NELSON E.D. ; FRITZ E.G. ; HAMAMOTO A.S.
CLSS: SRD
CONN: F 04701 72 C 0334
CORP: LOCKHEED PALO ALTO RESEARCH LAB. (PALO ALTO, CA.)
DATE: 7312
REPN: SAMSO TR 74 19 ; LMSC B324459
TEMP: A5587
TITL: RADIATION EFFECTS ON PASSIVE OPTICAL SENSOR COMPONENTS (U), CA. 450
P., (SRD)

.block
MAD529541L

.endblock
.block
copy: 1 id: 85950-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: MAD531284
ADNO: 531284
AUTH: WOOD W.R. ; VARNADO G.B.
CLSS: S
CORP: SANDIA LABS. (ALBUQUERQUE, N.M.)
DATE: 7408
REPN: SLA 74 0337
TEMP: A8419
TITL: AGM-28B ELECTROMAGNETIC RADIATION TEST (U), CA. 125 P., (S)

.block
MAD531284

.endblock
.block
copy: 1 id: 86009-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: MAD778996
ADNO: 778996
AUTH: TURNBULL L.S. JR. ; SUN D.F.D. ; SHAUB J.S.
CLSS: U
CONN: F 44620 73 C 0055
CORP: TEXAS INSTRUMENTS, INC. (DALLAS, TX.)
DATE: 7311
REPN: ALEX (02) TR 73 01 PT. C ; AFOSR TR 74 0782
TITL: DETERMINATION OF SEISMIC SOURCE PARAMETERS FROM FREQUENCY DEPENDENT
RAYLEIGH AND LOVE WAVE RADIATION PATTERNS (U), 192 P., (U)

.block

MAD778996

.endblock

.block

copy: 1 id: 86493-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD785521

ABS: RADIATION HAZARDS; FALLOUT DEPOSITS; RADIATION HAZARDS; GROUND
LEVEL; MATHEMATICAL MODELS; MONTE CARLO METHOD; NUCLEAR EXPLOSIONS;
ROUGHNESS; SCATTERING; SHIELDING

ADNO: 785521

AUTH: MALONEY J.C.

CLSS: U

CONN: DAHC 20 71 C 0228

CORP: ARMY BALLISTIC RESEARCH LABS. (ABERDEEN PROVING GROUND, MD)

DATE: 7405

REPN: BRL 1717

TITL: EXPERIMENTAL COMPARISON OF BURIED AND MIXED SOURCE GROUND ROUGHNESS
RESIDUAL RADIATION MODELS (U), 171 P., (U)

.block

MAD785521

.endblock

.block

copy: 1 id: 86529-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MAD918819

ADNO: 918819

AUTH: ENGELBURG W.V.

CLSS: U

CORP: ADVIESBUREAU DER GENIE (THE HAGUE, THE NETHERLANDS)

DATE: 7312

LA: NETHERLANDS

REPN: ABG 239 ; TDCK 63914

TITL: CALCULATIONS OF DOSES OF NUCLEAR RADIATION CAUSED BY FALLOUT (U),
CA. 40 P., (U)

.block

MAD918819

.endblock

.block

copy: 1 id: 86716-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MCONF7309076

AUTH: ROHWER P.S. ; BARON C.J. ; MOORE R.E. ; KAYE S.V.

CLSS: U

CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN.)

DATE: 7300

REPN: CONF 730907 6
TITL: EVALUATION OF NUCLEAR GAS STIMULATION IN TERMS OF POTENTIAL
RADIATION EXPOSURE TO THE PUBLIC (U), 18 P., (U)

.block

MCONF7309076

.endblock

.block

copy: 1 id: 87369-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MDOESF0115T3
AUTH: LEE H. ; MILLICAN R.
CLSS: U
CORP: STANFORD RESEARCH INSTITUTE (MENLO PARK, CA)
DATE: 7300
REPN: DOESF00115 T3
TITL: BATTLEFIELD RADIATION STUDY (U) 27P.

.block

MDOESF0115T3

.endblock

.block

copy: 1 id: 87444-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MORNLT5017
AUTH: SWEETON F.H. ; BARTON C.J.
CLSS: U
CORP: OAK RIDGE NATIONAL LAB. (OAK RIDGE, TN)
DATE: 7510
REPN: ORNL TM 5017
TITL: ESTIMATED POTENTIAL RADIATION DOSE FROM TRITIUM IN GASOLINE PRODUCED
FROM OIL SHALE BY USE OF NUCLEAR EXPLOSIVES (U), 19 P., (U)

.block

MORNLT5017

.endblock

.block

copy: 1 id: 87884-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: MUCRL51345
AUTH: TEWES H.A. ; LEVY H.B. ; SCHWARTZ L.L.
CLSS: U
CORP: LAWRENCE LIVERMORE LAB. (LIVERMORE, CA.)
DATE: 7302
REPN: UCRL 51345
TITL: NUCLEAR CHEMICAL COPPER MINING AND REFINING--RADIOLOGICAL
CONSIDERATIONS (U), 35 P., (U)

.block

MUCRL51345
.endblock
.block
copy: 1 id: 88511-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: PEP 3-1
ADNO: 919392
CLSS: U
CONN: F 29601 72 C 0087
CORP: Dikewood Corp. (Albuquerque, N.M.)
DATE: 7303
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: THEORY EXPERIMENTAL
REPN: AFWL TR 73 65 ; PEP 3 1
SUJO: 4-231-000
TITL: Pulsed Electrical Power Radiation Production Notes; Vol. 1, Notes
1-13 (U), 452 P., (U)
TREE: 642

.block
PEP 3-1
.endblock

.block
copy: 1 id: 50237-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: PEP 3-2
ADNO: 919393
CLSS: U
CONN: F 29601 72 C 0087
CORP: Dikewood Corp. (Albuquerque, NM)
DATE: 7303
DESC: Simulation Facilities Techniques TREE L1
DESC: THEORY EXPERIMENTAL
DESC: Simulation Facilities Techniques x-ray effects L1
DESC: Plasma Physics MHD fusion L5
REPN: AFWL TR 73 66 ; PEP 3 2
SUJO: 4-231-000 ; 4-272-000 ; 9-500-000
TITL: Pulsed Electrical Power Radiation Production Notes; VOL. 2, Notes
14-27 (U), 416 P., (U)
TREE: 642

.block
PEP 3-2
.endblock

.block
copy: 1 id: 50173-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: PEP 3-3
ADNO: 921131
CLSS: U
CORP: Air Froce Weapons Lab. (Kirtland AFB, NM)
DATE: 7305
DESC: THEORY EXPERIMENTAL
DESC: Simulation Facilities Techniques TREE L1
DESC: Plasma Physics MHD fusion L1
REPN: PEP 3 3 ; AFWL TR 73 170
SUJO: 4-272-000 ; 9-500-000
TITL: Pulsed Electrical Power Radiation Production Notes; Vol. 3, Notes
28-35 (U), CA. 300 P., (U)

.block

PEP 3-3

.endblock

.block

copy: 1 id: 52935-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: PEP 3-7
CLSS: U
CORP: Air Force Weapons Lab. (Kirtland AFB, NM.)
DATE: 7408
DESC: SURVEY
DESC: Simulation Facilities Techniques TREE L1
REPN: PEP 3 7
SUJO: 4-272-000
TITL: Pulsed Electrical Power Radiation Production Notes; Vol. 7 (U)

.block

PEP 3-7

.endblock

.block

copy: 1 id: 52976-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: PEP 3-7-59
AUTH: Forster D.W.
CLSS: U
CORP: Atomic Weapons Research Establishment (Aldermaston, England)
DATE: 7303
DESC: Simulation Facilities Techniques electronic vulnerability L1
DESC: THEORY
SUJO: 4-270-000
SYMJ: Pulsed Electrical Power Radiation Production Notes, Vol. 7
TITL: Current Flow in Space-Charge Limited Cylinder-Plane Diodes (U), 11
P., (U)

.block

PEP 3-7-59

.endblock

.block

copy: 1 id: 52978-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: PEP 3-7-60
AUTH: Martin J.C.
CLSS: U
CORP: Atomic Weapons Research Establishment (Aldermaston, England)
DATE: 7306
DESC: Simulation Facilities Techniques TREE L1
DESC: SUMMARY
LA: UK
SUJO: 4-272-000
SYMJ: Pulsed Electrical Power Radiation Production Notes, Vol. 7
TITL: HUN Lecture No. 4 (U), 8 P., (U)

.block

PEP 3-7-60

.endblock

.block

copy: 1 id: 52977-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent
.endblock

INUM: POR 6436
ADNO: 528 128L
AUTH: KRATZ H.R. ; RINEHART R.E.
CLSS: CFRD
CONN: DASA 01 69 C 0166
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)
DATE: 7310
DESC: Nuclear Weapon Environment Ground Shock motion strain fracture
displacement particle velocity L1
DESC: Nuclear Weapon Phenomenology Fireball Internal Pressure Temperature
Density Particle Velocities L5
DESC: EXPERIMENTAL
DESC: nuclear test detection seismic detection L5
DESC: Nuclear Weapon Environment Airblast static overpressure
OVERPRESSURE.L1
DESC: Nuclear Weapon Environment Ground Shock heating thermoluminescence
transitions L1 LATE TIME CAVITY HEATING
DESC: test instruments test hardware displacement strain L1
DESC: Nuclear Test Simulation Field Programs experiment design stemming
containment line of sight LOS L1
REPN: POR 6436 ; WT 6436
SHOT: DIAMOND DUST
TSHO: UG-CONTAINED
SUJO: 2-130-000 ; 2-611-000 ; 2-621-000 ; 2-629-000 ; 4-316-000 ;
4-829-700 ; 4-910-100
TEMP: A4570
TITL: DIAGNOSTIC MEASUREMENT; MIGHTY MITE SERIES, DIAMOND DUST EVENT (U),
238 P., (CFRD)

.block

POR 6436

.endblock

.block

copy: 1 id: 89879-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6473

ADNO: 529802L

AUTH: DAVIES K.E. ; EGGERS G.H.

CLSS: SRD

CONN: F 04701 72 C 0322

CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)

DATE: 7402

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1

DESC: Nuclear Weapon Effects missile systems strategic electronics L1

DESC: EXPERIMENTAL

EFFT: X-RAY

REPN: POR 6473 ; WT 6473 ; GULF RT A11097

SHOT: DIAGONAL LINE

TSHO: UG-CONTAINED

SUJO: 3-112-130 ; 3-222-000

SYST: MINUTEMAN III

TEMP: A5389 ; A6650 (MF)

TITL: COMPUTER PIECE-PARTS EXPERIMENT; MILD WIND SERIES, DIAGONAL LINE
EVENT (U), 146 P., (SRD)

TREE: 341

.block

POR 6473

.endblock

.block

copy: 1 id: 89906-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6479

ADNO: 526136L

AUTH: HOLMES A.B. ; GEHMAN S.E.

CLSS: SRD

CORP: HARRY DIAMOND LABS. (WASH., DC)

DATE: 7306

DESC: Nuclear Weapon Effects electronic subsystems recorders amplifiers L1

DESC: Nuclear Weapon Environment X-ray Output energy spectrum L9 P 22

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects electrical mechanical fluidic devices L1

EFFT: X-RAY

REPN: POR 6479 ; WT 6479

SHOT: DIAGONAL LINE

SUJO: 1-620-000 ; 3-213-000 ; 3-234-000

TEMP: A3860

TITL: EFFECTS OF NUCLEAR RADIATION ON A FLUIDIC SYSTEM; MILD WIND SERIES,
DIAGONAL LINE EVENT, PROJECT OFFICERS REPORT, PROJECT 77001 (U), 74

P., (SRD)

TREE: 350

.block

POR 6479

.endblock

.block

copy: 1 id: 89911-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6484

ADNO: 526208L

AUTH: MOORE C.D. ; GREEN L.F. ; EGGERS G.H.

CLSS: SRD

CCDE: DAFFER II

CONN: DASA 01 70 C 0143

CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)

DATE: 7306

DESC: Nuclear Weapon Effects electronic pieceparts transistors diodes
silicon-controlled rectifiers L1 TRANSISTORS

DESC: Nuclear Weapon Effects materials plastics resins L1 EPOXY LOADED
WITH A HIGH Z POWDER

DESC: Nuclear Weapon Effects materials coatings laminates L1

DESC: EXPERIMENTAL

DESC: Nuclear Weapon Effects materials metals alloys L1 AG MO CA GD TA AU

DESC: Nuclear Weapon Effects electronic pieceparts integrated circuits L1
HYBRID CIRCUITS

DESC: Nuclear Weapon Effects electronic subsystems analysis circuit
network L1 HYBRID CIRCUITS

REPN: POR 6484 ; WT 6484 ; GULF RT A11091

SHOT: DIAGONAL LINE

SUJO: 3-219-000 ; 3-221-000 ; 3-222-000 ; 3-243-000 ; 3-244-000 ;
3-245-000

TEMP: A3880

TITL: INTEGRATED CIRCUIT EXPERIMENT; MILD WIND SERIES, DIAGONAL LINE
EVENT, PROJECT OFFICERS REPORT--PROJECT 77701 (U), 240 P., (SRD)

TREE: 320

.block

POR 6484

.endblock

.block

copy: 1 id: 89914-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6492

ADNO: 528 315L

AUTH: EGGERS G.H. ; GREEN L.F. ; MOORE C.D.

CLSS: SRD

CONN: DASA 01 70 C 0143

CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)

DATE: 7310

DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1
DESC: Cross Sections x-ray L1
DESC: Nuclear Test Simulation Field Programs experiment design electrical
electronic cable noise instrumentation links L1 IEMP
DESC: Nuclear Weapon Effects missile systems ABM electronics L1
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic subsystems computers memory L1
EFFT: IEMP
EMPF: 822 ; 393; 397
REPN: POR 6492 ; WT 6492 ; GULF RT A11088
SHOT: DIAGONAL LINE
SUJO: 3-112-230 ; 3-212-000 ; 3-225-000 ; 4-829-500 ; 9-840-000
SYST: MINUTEMAN MISSILE AND COMPONENTS ; MINUTEMAN 3
TEMP: A4611
TITL: TEST OF MAGNETIC MEMORY UNITS; MILD WIND SERIES, DIAGONAL LINE EVENT
(U), 458 P., (SRD)
TREE: 343

.block

POR 6492

.endblock

.block

copy: 1 id: 89919-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6499 4
AUTH: PHILLIPS G.A.
CLSS: SRD
CONN: F 04701 70 C 0137
CORP: BOEING CO., AEROSPACE GROUP (SEATTLE, WA.)
DATE: 7406
DESC: Nuclear Weapon Effects ordnance explosives L1
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects missile systems strategic materials L1 PB
AZIDE
DESC: Nuclear Test Simulation Field Programs experiment design materials
L1

EFFT: X-RAY
REPN: POR 6499 4 ; WT 6499 4 ; D2 19507 2
SHOT: DIAGONAL LINE
TSHO: UG-CONTAINED
SUJO: 3-112-120 ; 3-163-000 ; 4-829-600
SYST: MINUTEMAN
TEMP: A8217
TITL: SPECIAL RADIATION TEST OF CERTAIN ORDNANCE COMPONENTS; MILD WIND
SERIES, DIAGONAL LINE EVENT (U), 350 P., (SRD)

.block

POR 6499 4

.endblock

.block

copy: 1 id: 89924-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6513
AUTH: CALDWELL P.A. ; LAMB R.C.
CLSS: SRD CNWDI
CORP: HARRY DIAMOND LABS. (WASH., DC)
DATE: 7501
DESC: Nuclear Weapon Environment Prompt Neutron dose rate pulse width L1
DESC: AT EXPERIMENTAL STATIONS ; EXPERIMENTAL
DESC: Nuclear Weapon Environment Initial Gamma energy spectrum L1
DESC: Nuclear Weapon Environment Initial Gamma dose rate pulse width L1
REPN: POR 6513 ; WT 6513
SHOT: NEW POINT
TSHO: UG-CONTAINED
SOCE: NEW POINT DEVICE
SUJO: 1-140-000 ; 1-720-000 ; 1-740-000
TEMP: A8884
TITL: TIME-RESOLVED RADIATION DOSIMETRY; MILD WIND SERIES, NEW POINT EVENT
(U), 114 P., (SRD CNWDI)
TREE: 910 ; 920

.block

POR 6513

.endblock

.block

copy: 1 id: 89932-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6572
ADNO: 530287L
AUTH: KRATZ H.R. ; RINEHART R.E.
CLSS: CFRD
CONN: DASA 01 71 C 0007
CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA)
DATE: 7404
DESC: Nuclear Weapon Environment Ground Shock cavities subsidence collapse
L1
DESC: Nuclear Weapon Environment Ground Shock impact pressure stress L1
CAVITY WALL STRESS
DESC: nuclear test detection seismic detection L1
DESC: Nuclear Weapon Environment Airblast static overpressure
OVERPRESSURE.L1 IN UG TEST CAVITY
DESC: Nuclear Weapon Environment Ground Shock motion strain fracture
displacement particle velocity L1 CAVITY DISPLACEMENT
DESC: COMPARISON WITH D. DUST EFFECT OF HEATSINK ; EXPERIMENTAL
REPN: POR 6572 ; WT 6572 ; GULF RT A11110
SHOT: DIAMOND MINE ; DIAMOND DUST
TSHO: UG-CONTAINED
SUJO: 2-611-000 ; 2-621-000 ; 2-623-000 ; 2-627-000 ; 4-910-100
TEMP: A6543
TITL: DIAGNOSTIC MEASUREMENTS; MIGHTY MITE SERIES, DIAMOND MINE EVENT (U),
198 P., (CFRD)

.block

POR 6572

.endblock

.block

copy: 1 id: 89964-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6641

AUTH: BARDON R.L.

CLSS: SRD

CONN: F 04701 72 C 0210

CORP: BOEING AEROSPACE CO. (SEATTLE, WA.)

DATE: 7408

DESC: Nuclear Weapon Effects missile systems strategic propulsion L1 LOSS

OF CRITICAL FUNCTION ORIFICES GOLD BRAZE FLEXIBLE BRAID PRESSURIZED
HEATED TUBE JOINTS FIBERGLASS-BE RINGS PROPELLENT TANK STEEL BOLTS

DESC: COMPONENTS AND MATERIALS FROM SECOND AND THIRD STAGE ROCKET ENGINES
AND THE PROPULSION SYSTEM ROCKET ENGINE

EFFT: X-RAY

REPN: POR 6641 ; WT 6641

SHOT: MISTY NORTH

SUJO: 3-112-140

SYST: MINUTEMAN

TEMP: A8452

TITL: SPECIAL RADIATION TEST OF SELECTED MATERIALS AND COMPONENTS; MINUTE
GUN SERIES, MISTY NORTH EVENT (U), 288 P., (SRD)

.block

POR 6641

.endblock

.block

copy: 1 id: 90003-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6659

AUTH: PEPPER C.S. ; BLAKESLEE R. ; HARDWICK W. ; KOTT B. ; MORRIS J.

CLSS: U

CONN: DASA 01 71 C 0170

CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)

DATE: 7306

DESC: Nuclear Test Simulation Field Programs experiment design stemming
containment line of sight LOS L1

DESC: test instruments thermal temperature L1

DESC: LOS PIPE ; EXPERIMENTAL SUMMARY

DESC: Nuclear Weapon Environment Ground Shock heating thermoluminescence
transitions L5

REPN: POR 6659 ; WT 6659

SHOT: DORSAL FIN ; HUDSON SEAL ; MING VASE ; DIESEL TRAIN ; DIANA MIST ;
MINT LEAF ; HUDSON MOON ; MISTY NORTH

TSHO: UG-CONTAINED

SUJO: 2-629-000 ; 4-384-000 ; 4-829-700

TEMP: A3879

TITL: MEASUREMENT OF TUNNEL ENVIRONMENT; MINUTE GUN SERIES, PROJECT
OFFICERS REPORT--PROJECT 986.01 (U), 83 P., (U)

.block

POR 6659

.endblock

.block

copy: 1 id: 90023-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6726

AUTH: PEPPER C.S. ; BLAKESLEE R. ; KOTT B.

CLSS: U

CONN: DASA 01 71 C 0170

CORP: GULF RADIATION TECHNOLOGY (SAN DIEGO, CA.)

DATE: 7406

DESC: Nuclear Test Simulation Field Programs experiment design underground
systems L1

REPN: POR 6726 ; WT 6726 ; GULF RT A12305

SHOT: DIAMOND SCULLS

SUJO: 4-829-300

TITL: MEASUREMENT OF TUNNEL ENVIRONMENT; MINUTE GUN SERIES, DIAMOND SCULLS
EVENT (U), 70 P., (U)

.block

POR 6726

.endblock

.block

copy: 1 id: 90053-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6758

AUTH: MCALLISTER K.D.

CLSS: SRD CNWDI

CORP: DEFENSE NUCLEAR AGENCY FIELD COMMAND, TEST DIRECTORATE (KIRTLAND
AFB, N.M.)

DATE: 7310

DESC: Nuclear Weapon Effects electronic piecparts integrated circuits L9
ADVANCED PACKAGING TECHNIQUES

DESC: Nuclear Weapon Effects missile systems ABM materials L9 URANIUM
ALLOY SHIELD PROPELLENT

DESC: SUMMARY

DESC: Nuclear Test Simulation Field Programs experiment design engineering
layout performance program documents L5

DESC: Nuclear Weapon Effects reentry systems RV structures L1 WARHEADS
BUCKLING

DESC: Nuclear Weapon Environment X-ray Output energy spectrum L9

DESC: Nuclear Weapon Effects ordnance explosives L9 LINEAR SHAPED CHARGES
LEAD AZIDE

DESC: Nuclear Weapon Effects ordnance electroexplosive devices fuses L5
ARMING + FUSING ELECTRONICS

DESC: Nuclear Weapon Effects reentry systems RV materials L1 BASELINE

MATERIALS FOR VARIOUS REGIONS OVERLAYS [REDACTED]

DESC: Nuclear Weapon Effects missile systems ABM electronics L9 FIRING
SETS
DESC: Nuclear Weapon Effects reentry systems RV materials shielding L1
WARHEAD HARDNESS
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L9
DESC: Nuclear Weapon Effects ordnance propellants solid L9
DESC: Nuclear Weapon Effects reentry systems RV electronics L5 ARMING +
FUSING BRIDGE WIRES SURFACE FUSE
DESC: Nuclear Weapon Environment X-ray Output source strength total
intensity L9
DESC: Nuclear Weapon Effects electronic pieceparts L9
DESC: Nuclear Weapon Effects space systems spacecraft or satellites
materials L9 TUNGSTEN
DESC: test instruments x-ray effects L5 GAGE DEVELOPMENT + PHENOMENOLOGY
DESC: Nuclear Weapon Effects ordnance bombs mines warheads nuclear L5
WARHEAD DETONATOR DAMAGE BY NEUTRONS TIMING
DESC: Nuclear Weapon Effects electronic pieceparts solar cells L9 HARDENED
DESC: Nuclear Weapon Effects electrical mechanical fluidic devices L9
DESC: Nuclear Weapon Effects electronic pieceparts resistors capacitors
vacuum tubes dielectrics relays switches L5 X-RAY DIODES NEUTRON
GENERATOR MEMORY ARRAYS
DESC: Nuclear Weapon Environment Prompt Neutron source strength total
fluence L9
EFFT: X-RAY ; NEUTRON ; IEMP
EMPF: 396
REPN: POR 6758 ; WT 6758
SHOT: DIDO QUEEN ; BANE BERRY ; DIANTHUS
TSHO: UG-CONTAINED
SOCE: [REDACTED]
SUJO: 1-110-000 ; 1-120-000 ; 1-610-000 ; 1-620-000 ; 3-112-220 ;
3-112-230 ; 3-113-100 ; 3-113-200 ; 3-113-230 ; 3-113-300 ;
3-114-200 ; 3-161-100 ; 3-162-000 ; 3-163-000 ; 3-164-000 ;
3-220-000 ; 3-222-000 ; 3-223-000 ; 3-229-000 ; 3-234-000 ;
4-330-000 ; 4-820-000
SYST: MK 400 RV ; MK 3 RV ; SRINT ; SPARTAN ; MK 4 RV
TEMP: A4528
TITL: DIDO QUEEN PRELIMINARY RESULTS REPORT; MINUTE GUN SERIES, DIDO QUEEN
EVENT (U), 250 P., (SRD CNWDI)

.block

POR 6758

.endblock

.block

copy: 1 id: 90068-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6772 1
ADNO: C001185L
AUTH: BARDON R.L.
CLSS: SRD
CONN: F 04701 72 C 0210
CORP: BOEING AEROSPACE CO. (SEATTLE, WA.)

DATE: 7501
DESC: Nuclear Weapon Effects ordnance explosives L1
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects missile systems strategic propulsion L1
EFFT: X-RAY
REPN: POR 6772 1 ; WT 6772 1
SHOT: DIDO QUEEN
TSHO: UG-CONTAINED
SUJO: 3-112-140 ; 3-163-000
SYST: MINUTEMAN III
TEMP: A8924
TTTL: SPECIAL RADIATION TEST OF LEAD SHEATHED LINEAR SHAPED CHARGE; MINUTE
GUN SERIES, DIDO QUEEN EVENT (U), 82 P., (SRD)

.block

POR 6772 1

.endblock

.block

copy: 1 id: 90081-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6843
AUTH: COOPER P. ; CRAMER J.D. ; HIGGINS R.W.
CLSS: SRD CNWDI
CONN: DNA 001 74 C 0165
CORP: SCIENCE APPLICATIONS, INC. (ALBUQUERQUE, NM)
DATE: 7505
DESC: THEORY EXPERIMENTAL
DESC: Nuclear Weapon Environment Prompt Neutron energy spectrum L1
DESC: test instruments nuclear radiation neutron L1
REPN: POR 6843 ; WT 6843 ; SAI 75 201 AQ
SHOT: HYBLA FAIR
TSHO: UG-CONTAINED
SUJO: 1-120-000 ; 4-342-000
TEMP: B1185
TTTL: NEUTRON SPECTRAL MEASUREMENT ON THE HYBLA FAIR EVENT; HUSSAR SWORD
SERIES, HYBLA FAIR EVENT (U), 82 P., (SRD CNWDI)
TREE: 920 ; 652

.block

POR 6843

.endblock

.block

copy: 1 id: 90130-1001 library: DOCUMENT price: \$.00
cat1: cat2: home: STACKS current: STACKS
created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6859
ADNO: C004623L
AUTH: MILLER R.I. ; LE PAGE J.J. ; NEVAREZ W.L.
CLSS: CRD
CONN: DNA 001 74 C 0184
CORP: SCIENCE APPLICATIONS, INC. (SUNNYVALE, CA)

DATE: 7508
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Environment Ground Shock motion strain fracture
displacement particle velocity L1 SIMULATION OF INITIAL RADIATION
DEPOSITION
DESC: test instruments x-ray effects L1
REPN: POR 6859 ; WT 6859 ; SAI 75 201 SV
SHOT: MING BLADE
TSHO: UG-CONTAINED
SUJO: 2-621-000 ; 4-330-000
TEMP: B0506
TTTL: MEASUREMENT OF RADIATION-INDUCED TEMPERATURES IN AN ENERGY COUPLING
EXPERIMENT; HUSSAR SWORD SERIES, MING BLADE EVENT (U), 90 P., (CRD)

.block

POR 6859

.endblock

.block

copy: 1 id: 90140-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: POR 6894
ADNO: C007353L
AUTH: PASSENHEIM B.C. ; MOORE C.D.
CLSS: SRD
CONN: N 60921 74 C 0402
CORP: INELCOM RAD TECH (SAN DIEGO, CA)
DATE: 7511
DESC: EXPERIMENTAL
DESC: Nuclear Weapon Effects electronic pieceparts magnetic devices L1
EFFT: X-RAY ; IEMP ; TREE
EMPF: 393
REPN: POR 6894 ; WT 6894 ; INTEL RT 8118 023S
SHOT: DINING CAR
TSHO: UG-CONTAINED
SOCE: XXXXXXXXXX
SUJO: 3-225-000
TEMP: B2352
TTTL: RADIATION EFFECTS IN MAGNETIC MEMORIES; HUSSAR SWORD SERIES, DINING
CAR EVENT (U), 232 P., (SRD)
TREE: 343

.block

POR 6894

.endblock

.block

copy: 1 id: 90159-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock

INUM: TN 74 05
AUTH: FERYOK A.
CLSS: CFRD

CONN: DNA 001 74 C 0014
CORP: DASIAC (SANTA BARBARA, CA)
DATE: 7412
DESC: EXPERIMENTAL SURVEY
DESC: Cross Sections gamma L1
DESC: Nuclear Weapon Effects land transport armored vehicles L1 CREW

CONSIDERATIONS

DESC: Nuclear Weapon Effects on animals ionizing radiation prompt L1
DESC: Cross Sections neutron L1
REPN: DASIAC TN 74 05
SUJO: 3-151-000 ; 3-312-100 ; 9-820-000 ; 9-830-000
TEMP: B3345
TITL: RADIATION TRANSMISSION FACTORS FOR U.S. MILITARY ARMORED VEHICLES; A
DATA COMPILATION (U), 30 P., (CFRD)
TREE: 411 ; 412

.block

TN 74 05

.endblock

.block

copy: 1 id: 91008-1001 library: DOCUMENT price: \$.00

cat1: cat2: home: STACKS current: STACKS

created: 12/27/1991 type: REPORT permanent

.endblock